

Modern packaging



Nominated for packaging's Hall of Fame. Story on Page 88

February 1950

"STILL SKEPTICAL?"

ABOUT WET-PROOF LABELING GUMS

Let's talk facts, not fancy. We've fully production-proved a casein-base labeling gum that's really uniform.

IMPERVO 44 is more than wet-proof. It will withstand tepid water (70°F) less than 5 minutes after the bottles come off the line, and will produce a tearing band after 2 weeks immersion!

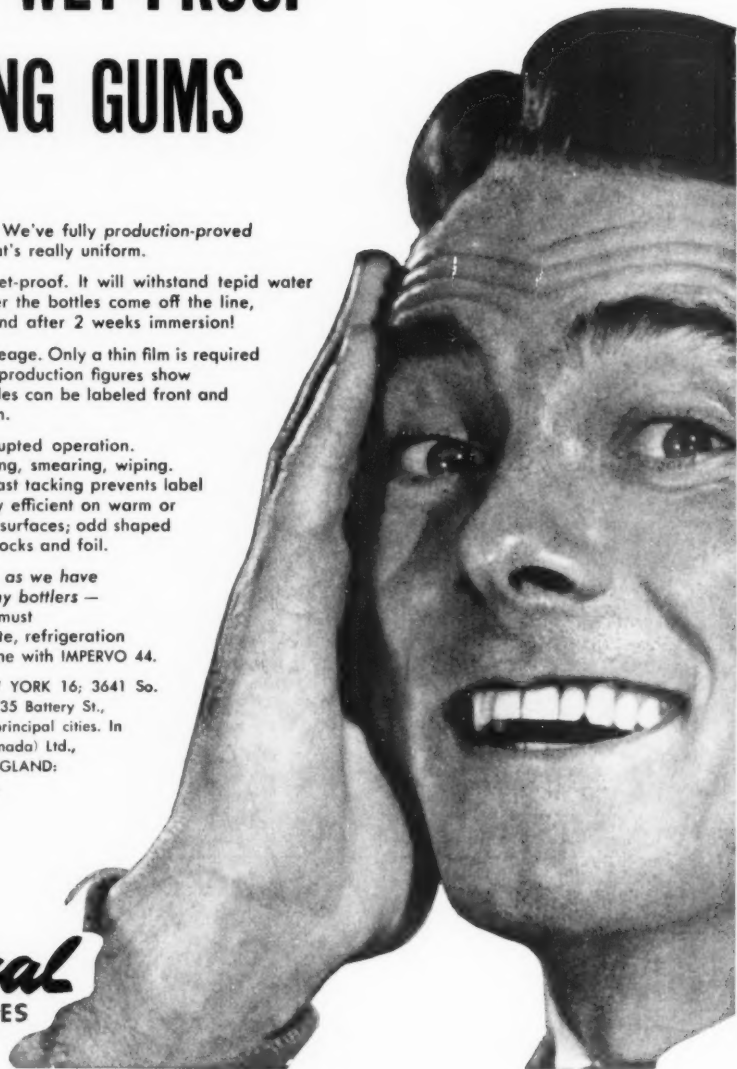
IMPERVO 44 yields terrific mileage. Only a thin film is required for efficient operation. Actual production figures show that more than 2,000,000 bottles can be labeled front and back with one fifty gallon drum.

IMPERVO 44 assures uninterrupted operation. It machines cleanly. No webbing, smearing, wiping. It permits immediate nesting. Fast tacking prevents label slippage. It is versatile. Equally efficient on warm or wet bottles; smooth or stippled surfaces; odd shaped containers, heavy or varying stacks and foil.

We can easily prove to you — as we have already proved to a great many bottlers — that any type of labeling that must withstand wet hands, condensate, refrigeration or immersion — can best be done with IMPERVO 44.

Address: 270 Madison Ave., NEW YORK 16; 3641 So. Washtenaw Ave., CHICAGO 32; 735 Battery St., SAN FRANCISCO 11; and other principal cities. In CANADA: National Adhesives (Canada) Ltd., TORONTO and MONTREAL. In ENGLAND: National Adhesives, Ltd., SLOUGH.

National
ADHESIVES



EVERY TYPE OF ADHESIVE FOR EVERY INDUSTRIAL USE



Modern packaging



Vol. 23 No. 6 February 1950

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To America's best-shaved men...
goes famous

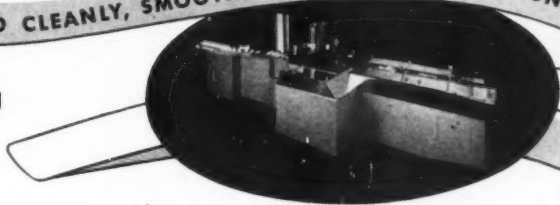
Old Spice

AFTER-SHAVE LOTION



CARTONED CLEANLY, SMOOTHLY, ECONOMICALLY ON ONE REDINGTON

Both small and
large Bottles



THE REDINGTON TYPE 23

Instantly Adjustable to both Old Spice After Shave Lotion sizes—4 3/4 ounce, 9 1/2 ounce. Arranged also to handle the 4-ounce bottle of Old Spice Toilet Water.

Shulton wanted to be sure

For their unique Old Spice bottles, Shulton, Inc. designed a very smart new carton. This leading national manufacturer wanted their attractive package to go to market in style—cartoned with care, yet speedily and economically. To make sure they sent for Redington.

Redington was ready—

—as Redington is always—to supply the right method and machine to do the job most efficiently. The cartoner built for Shulton was made adjustable to handle both the 4 3/4 ounce and the 9 1/2 ounce bottles of After Shave Lotion. An additional convenience was offered; the machine was arranged so that, later, parts can be purchased to enable the handling also of 4-ounce Old Spice Toilet Water bottles.

Operation is tailored to suit

Filled and closed After Shave Lotion bottles, standing upright, are fed directly onto the intake belt of the Redington. Corrugated protectors and cartons are placed in magazines. Machine then places the bottles in pockets of the intake conveyor, feeds corrugated protectors from magazine, and

places them around the bottles (corrugations inside). Cartons are fed from magazine, expanded, bottles with corrugated protectors inserted, and cartons are closed by tucking in the end flaps.

Push

At Shulton's request, Redington engineers also devised a special-purpose mechanism. Attached to the machine at the discharge end, it pushes the completed packages out with sufficient power so that a line several feet long will move over a packing table.

What about YOUR cartoning problem?

Whether your production output is high or small, Redington methods—proved outstanding in 53 years of pioneering experience—offer you peak efficiency and tailored-to-your-need service. Any time you phone or write, our staff of experts are ready to give you helpful counsel, promptly and without obligation. Call on Redington—now!

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53 Years of Packaging Leadership

AUTOMATIC CARTONING • WRAPPING • SPECIAL PACKAGING

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A WORD ABOUT A WORD

WE CONFESS WE ARE UNABLE to understand why, in some sections of the packaging field, there seems to be mystification over the meaning of "pre-packaging" and a yearning for "a better word."

What better word could there be?

Pre-packaging is the packaging *previous* to sale of items that customarily have not been packaged until *after* sale. It's as simple as that.

It is, of course, a transitory term, applying only during the time that prior-to-sale packaging is moving into a field of products where it has not previously been generally used; e.g., fresh meats and produce today. As soon as packaging becomes the rule rather than the exception in any field, the "pre" loses its meaning and is dropped, like the tail of a tadpole.

During the transition period the "pre" serves a real purpose, because of course nothing goes out of a grocery store today that isn't *packaged*, in a sense. Nobody carries home an unwrapped beefsteak. But the language of packaging would be hopelessly loose if we didn't have some way of distinguishing between the steak which is pre-cut, pre-weighed, pre-priced and pre-packaged, and that which is cut to order and tied up in butcher paper and string.

Although our experience doesn't go back quite that far, we venture to say that the first Uneceda Biscuits, back in 1899, were referred to as "pre-packaged crackers." The whole history of packaging could be very effectively traced by finding the times at which products have become accepted as customarily "packaged," rather than "pre-packaged."

While we're at it, we'd like to plead for a distinction between *pre-packaging* and *pre-packing*. "Packing," in our lexicon, means the protective packing and cushioning of an item as for shipment. A set of tumblers that is shipped, sold and delivered (or carried home) in the manufacturer's specially devised corrugated container is *pre-packed*; string beans in a cellophane bag are *pre-packaged*. There is, and should be, a difference.

The Editors



PACKAGING SUCCESSES

SAMPLING MORE EFFECTIVE IN CELLOPHANE BAGS: Bread-sampling has come back for many bakeries, with excellent sales results. Individual slices, enclosed in printed cellophane bags, give shoppers an easy way to judge quality and taste without buying a full loaf. Similar methods can be equally successful for almost any product, using cellophane or other films, laminated foils and films or other protective, quality-insuring wrappers.

DOLLS "BREATHE" IN NEW PACKAGE: Children can squeeze the rubber dolls made by Serugo Rubber Company and they'll still "cry", even in their cellophane packages. That's because tiny "trap-door ventilators" permit ingress of fresh air. They also allow exit of slightly odorous air from the rubber composition. This same ventilating principle is being very successfully applied to pre-packaging of fresh fruits and vegetables to preserve taste and appetizing appearance.

PROFITS FROM BY-PRODUCTS: Although extremely useful for home weaving of household items, waste hosiery ends could not be sold by Nelly Bee Products, of Hickory, N. C. Then, they started packaging them in attractively printed cellophane bags—and now they can't meet the popular demand.

NEW MUSHROOM PACKAGE BRINGS 50% SALES INCREASE: Gaily printed wraps for fresh mushrooms are credited with 50% sales increase in first month of use, for Shady Oak Mushrooms, packed by West Foods, Inc., Salem, Ohio. Made of



Lumarith film, these new packages greatly improve appearance and, at the same time, prevent loss from contamination or handling.

THESE SUCCESS STORIES are typical of results obtained with Dobeckmun packaging ideas. We'll be glad to work with you to give your products a new sparkle and impact that will bring greater customer satisfaction and increased sales. The Dobeckmun Company, Cleveland 1, Ohio. Berkeley 2, California.



IMPACT PACKAGING SELLS IDEAS FOR WORK OR PLAY

"Transparent bags for our work gloves were an instant success" reports the Star Glove Company of Detroit. "Colorfully printed, these Dobeckmun bags have wonderful display value and customers can see what they are getting." Retailers like this faster turnover. Mark-down losses are reduced, too, because the contents stay fresh and clean.

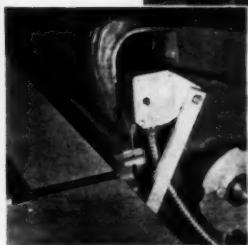
Eagle Rubber Company of Ashland, Ohio, is enjoying the same enthusiastic response to their toy balloons, quantity-packed in whimsically-printed cellophane bags by Dobeckmun. They're selling 20 or more balloons at once, instead of singly. That means greatly increased volume for retailers at little increase in sales cost.

Novelty or essential, work or dress gloves, toys, hardware, textiles, foods—almost any product sells faster and stays salable longer when given impact packaging by Dobeckmun, in brightly printed, transparent wrappings. Dobeckmun processed sheets, rolls and bags are readily adaptable to modern, high-speed, packaging machinery. For practical suggestions, send us samples or ask our nearby packaging specialists. *The Dobeckmun Company, Cleveland 1, Ohio. Berkeley 2, Calif.*

Branches at Atlanta, Boston, Chicago, Cincinnati, Los Angeles, Milwaukee, New York, Philadelphia, Portland, St. Louis, St. Paul and Seattle. Representatives everywhere.



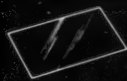
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MODEL 103
18" FOLDER (90° AND 180° ANGLE OF FOLD)
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BLANK



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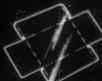
FOLD 180°



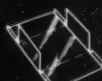
PUNCH HOLES



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PRICE \$675 F.O.B.



BLANK



FOLD 90°



FOLD 90°



WELD CORNERS
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FEBRUARY 1950

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says Crivella



My Traver designed family style produce packages bring garden fresh vegetables to consumers and more profits to me. They make "a look a purchase" wherever they are on sale.

Traver experts do a complete job from design to finished package. Our long years of experience in flexible packaging is at your service.

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There is no obligation. Sales offices in
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Colorfully printed transparent cellophane bags not only add sales appeal but the extra protection that brings produce to consumers fresh and crisp.



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ROCKWELL *Continuous Motion* AUTOMATIC CARTONERS

View of packaging room in Heyden plant showing installation of two Rockwell automatic cartoners.



Increase Production
FIVE-FOLD
For Heyden Chemical Corp.
Princeton, N. J.



SUBSTANTIAL SAVINGS are reported by Heyden Chemical Corporation through the use of two Rockwell automatic cartoners. The machines are packaging 10 cc and 20 cc vials of Heyden penicillin and streptomycin. Heyden officials say production rates for the Rockwell cartoners are in excess of 135 per minute. Total output has been increased about 5 times over hand loading without increase in the payroll.

Rockwell machines will handle many types of cartons. They can be quickly adjusted for a change in carton size by simply resetting the position of dial controlled compounds on the machine bed.

Use the convenient coupon to get full details. Mail it today.

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FOR
FULL DATA**

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Subsidiary of Rockwell Manufacturing Co.
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Gentlemen:

Please send me full information on Rockwell automatic cartoners for packaging.

We are sending samples ☐ yes; ☐ no. We are interested in single pack ☐; multiple pack ☐.

COMPANY _____

STREET _____ ZONE _____ STATE _____

CITY _____ POSITION _____

YOUR NAME _____

"A GOOD Package Design is MORE than art-work"

Says:
EGMONT ARENS
*(One of America's
top-flight package designers)*

"Designing a package is not just a matter of putting a pretty picture on a box. It is the proper coordination of many elements such as basic structure, package machinery, consumer research, color and design. Above all, it calls for careful selection of packaging materials that will protect the product from factory to home."

Check the sales leaders in field after field and you will find well-engineered packages . . . and over and over again, you will find a Riegel paper inside for product protection. Many other Riegel papers are designed for flexible packages, for laminates, for outer wraps and for almost every requirement in protective packaging . . . papers that always perform smoothly on modern high-speed machines.

Tell us your needs, and we believe we can offer you a paper that will do your job . . . efficiently and economically.

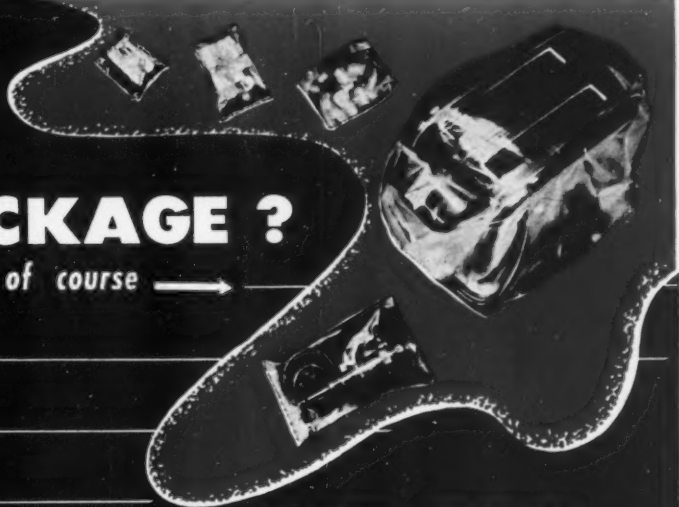
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Protective Packaging*

the PACKAGE ?

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For:

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repeats success of the famous
TONI HOME PERMANENT



... and Wirz is glad to participate in the production of this handsome collapsible metal tube with its eye-compelling design, its good taste and "quality" feeling. Designed to be a member of the "Toni family of products", and an important element in the over-all Toni merchandising plan, Toni Creme Shampoo met instant favor with women everywhere. Wirz Tubes have proven themselves valuable merchandising aids as well as practical containers for a variety of creams, pastes, powders, greases and semi-liquids. If you have a product of this type, consider Wirz Tubes. They'll assure protection—convenience and sales appeal. Call or write our nearest representative today. Send for our new Tube booklet #M9.

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all 'round label
in actual use on
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Rich metallic colors and the eye-stopping gleam of aluminum itself make the Rumford Baking Powder package stand out on every shelf... a compelling invitation to pick this product in preference to stacked-up competition. And this moisture-proof aluminum foil wrap has a protective advantage, too, on the Rumford container. For labels or complete protective packaging, let us show you what Reynolds Aluminum can do... right on your own product.

REYNOLDS METALS COMPANY,
Richmond 19, Va.



REYNOLDS ALUMINUM



Toni CREME SHAMPOO

repeats success of the famous
TONI HOME PERMANENT

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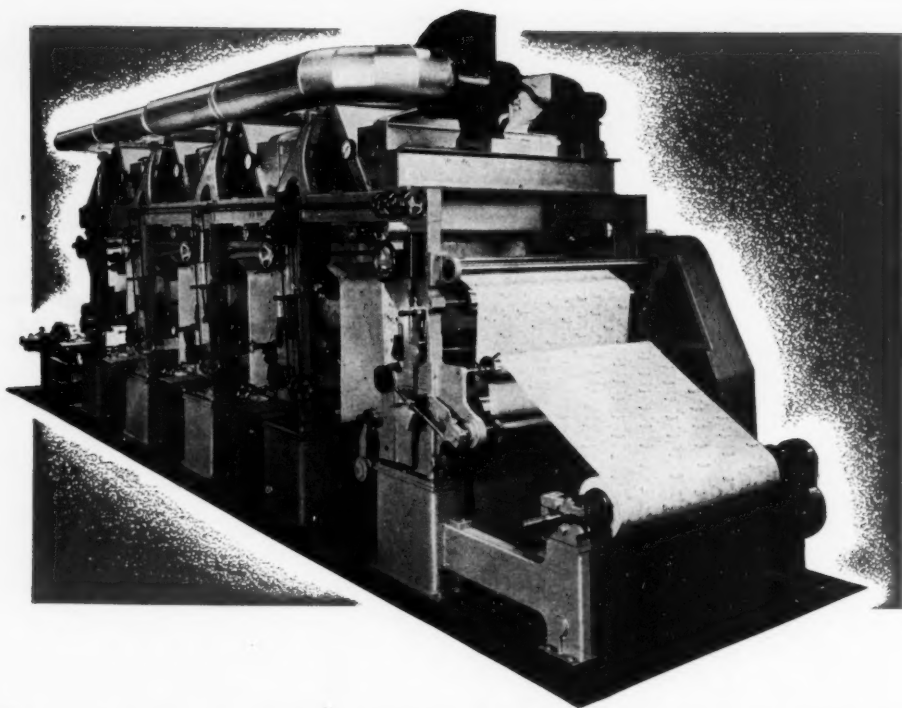
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tip-on and see this
Reynolds Aluminum
all 'round label
in actual use on
Rumford Baking Powder

Rich metallic colors and the eye-stopping gleam of aluminum itself make the Rumford Baking Powder package stand out on every shelf...a compelling invitation to pick this product in preference to stacked-up competition. And this moisture-proof aluminum foil wrap has a protective advantage, too, on the Rumford container. For labels or complete protective packaging, let us show you what Reynolds Aluminum can do...right on your own product.

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Richmond 19, Va.



REYNOLDS ALUMINUM



THE GREATEST VALUE IN GRAVURE

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One of five standardized types for every rotogravure press need

The press pictured here is built in web widths of 32" and 44" for printing on glassine, cellophane, film, laminated foils and a wide range of papers. Comprises four printing units that will print four colors one side, two colors both sides, or three colors one side and one color the other side, at operating speeds up to 450 feet per minute. This press has pull roll with slitters and center shaft rewind, and rotary sheeter or folder can be added.

ATF-Klingrose presses are made to produce the finest web-fed gravure printing for every requirement. They are equipped with many exclusive features to afford the utmost in speed, accessibility, efficiency, accuracy and economy.

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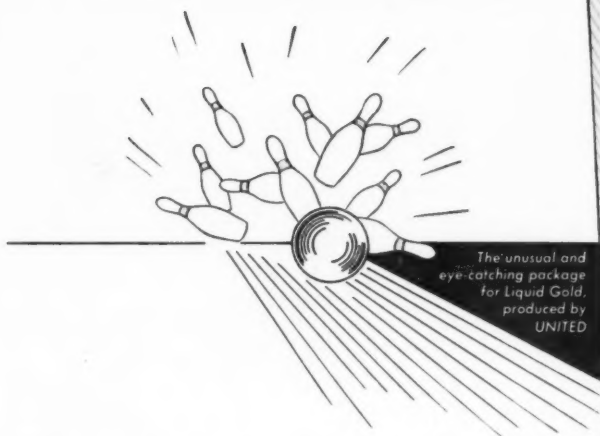
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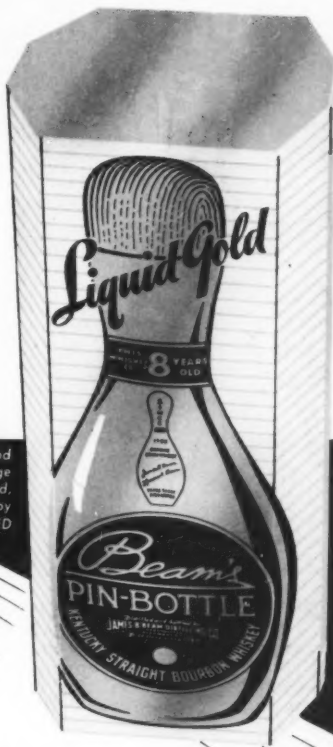
MODERN PACKAGING

FOIL BOX

PEPS UP SPIRIT SALES



The unusual and eye-catching package for Liquid Gold, produced by UNITED



No matter what you sell, even if it is Liquid Gold, the package is all important. That's why every day more and more manufacturers turn to Foil Cartons.

The magic of Foil has boosted the sales of many slow-moving products. It has turned many popular products into top-notch sellers. How about your product? Does it really stand out on shelves and counters? Does it outshine the competitor's package? Does it attract the eye, hold attention, and open the buyer's purse?

It will in Foil Cartons. Write for your free copy of "The Magical Formula," and learn how Foil Cartons can step up your sales.



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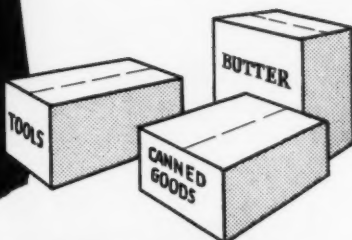
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Lockport, N. Y.; Thomson, N. Y.; Urbana, O.

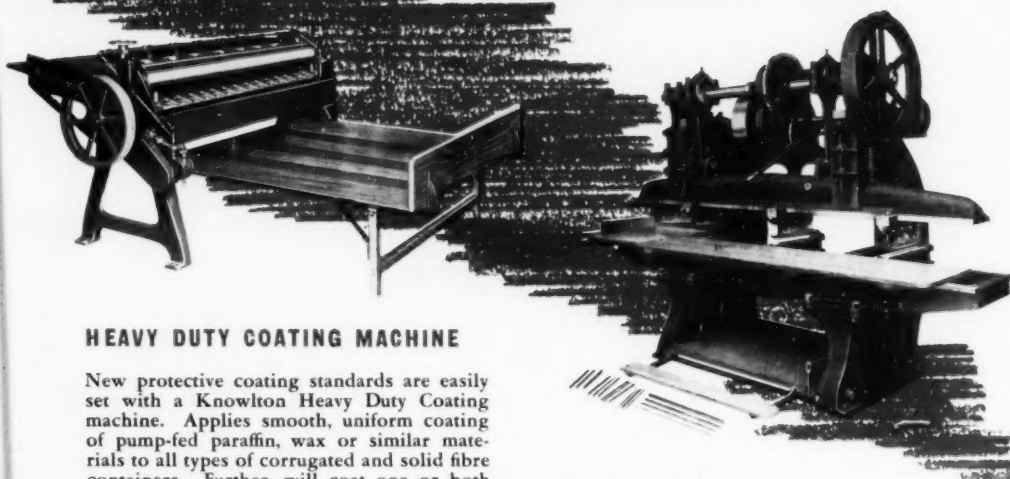
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Victory Mills, N. Y.; Syracuse, N. Y.; Brooklyn, N. Y.; Cohoes, N. Y.; Springfield, O.

RUGGED PRODUCTION TEAM...



FOR CORRUGATED AND SOLID FIBRE CONTAINERS



HEAVY DUTY COATING MACHINE

New protective coating standards are easily set with a Knowlton Heavy Duty Coating machine. Applies smooth, uniform coating of pump-fed paraffin, wax or similar materials to all types of corrugated and solid fibre containers. Further, will coat one or both sides in one operation. Fully adjustable to apply coatings of any desired thickness. Split coating collars (2" or 3" width) can be furnished to obtain *uncoated* flap sections. Electric or steam heated. Thermostat control optional. Users acknowledge that Knowlton Heavy Duty Coating machine is not surpassed for efficient and economical production.

KNOWLTON ALSO MAKES
Rotary Slitters • Creasers • Bar Creasers
• Set-Up Box Equipment • Spiral and
Convolute paper tube and can-making
equipment • Knowco Gummed Stay
Paper (Brown, Gray, and White)

VERTICAL STROKE SLOTTING MACHINE

Where special slotting jobs come up often—especially short runs—the 100-inch Knowlton Vertical Stroke Slotting machine will turn them out faster and more economically. Quickly adjustable and set up, fast and accurate change-overs. Open frame design enables speedy changes in cutting blanks and knives. This Slotting Machine has a host of features worth an inquiry, for container makers seeking lower costs.

BOSTON
637 Massachusetts Ave.
(ARLINGTON)



BROOKLYN
45-53 Beaver St.

CHICAGO
9 S. Clinton St.

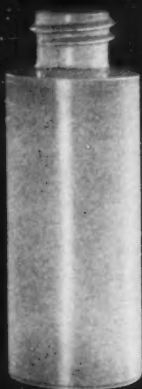
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280 Richmond St. W.

Pacific Coast Representatives
H. W. BRINTHALL CO.
San Angeles, San Francisco, Seattle

ROCHESTER, NEW YORK

The Handiest

Bottle Ever Made!



ELMER E. MILLS CORPORATION'S

Polyethylene

Plastic Bottle

This is *the* bottle with consumer appeals so strong they actually help sell your product!

It's unbreakable—a powerful consumer selling point on safety and thriftiness.

It's lightweight—takes up less space (and incidentally cuts your shipping cost).

It's a "squeeze bottle"—can be readily adapted to use as a stream—as a spray—as a sprinkler finish.

Our stock bottle is available in 1—2—4—8 ounce sizes. Through a special printing process we can print your label or design right on the bottle.

In addition to the production of this stock bottle and stock closure, we also custom make other thermoplastic bottles, closures and atomizers. You can depend upon their being made with the same high standards of craftsmanship which keynote all Mills plastic products.

For more information on our custom molding service, or for a free sample bottle, write us or our sales agent today.

ELMER E. MILLS CORPORATION

2930 N. Ashland Ave., Chicago 13, Illinois

Sales Agent: W. BRAUN & COMPANY

Chicago, 300 N. Canal St.

New York, 595 Fifth Ave.

Customer

STOP

Sign

What makes the customer stop when she sees the "Bobby-pin Comb"?*

Is it the comb? No. There are numerous varieties of plastic combs.

Is it the bobby-pins? No. Bobby-pins are as plentiful as toothpicks.

It's the combination of the comb and bobby-pins in one attractive, useful package that attracts the customer's attention!

Here, creative imagination at Columbia has fashioned a beautiful plastic comb capable of carrying a good supply of bobby-pins in a novel clip-type compartment.

It's new. It's different. It's attractively designed. It's practical. Most important of all, it sells!

MORAL

If you're looking for something different...something highly saleable in plastic packaging...why not put our extensive facilities and years of merchandising experience to work for you. For many manufacturers, Columbia's packaging know-how has been the profitable "GO" sign for greater sales through better packaging.



Columbia Protokosite Co., Inc.
New York Showrooms:

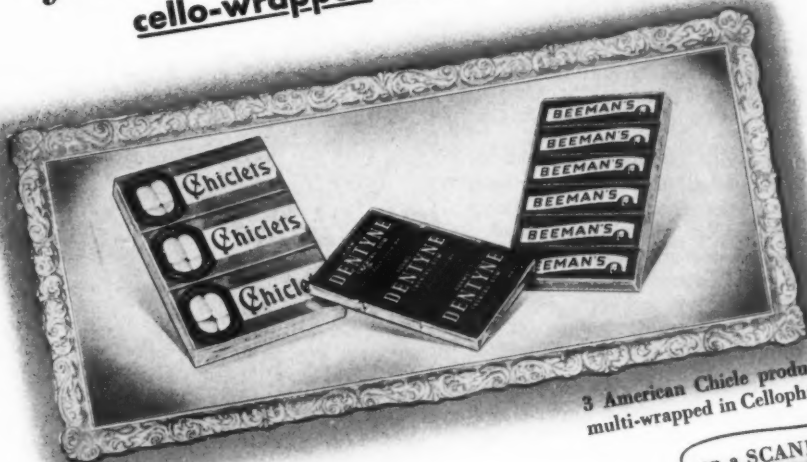


*PAT. PEND.

Unique swivel action creates self-locking compartment for bobby pins. Lid swings closed to form attractive easy-grip comb handle.

Carlstadt, New Jersey
Empire State Bldg.

MULTI-PACKS for multiple sales cello-wrapped at Lower Cost



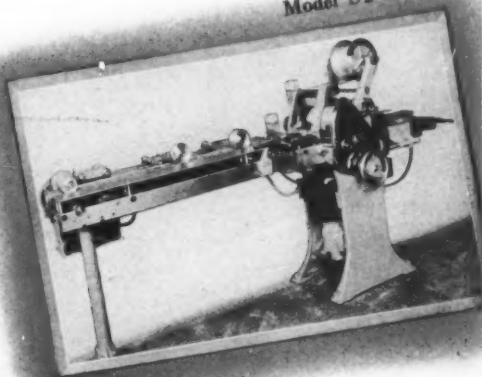
3 American Chicle products
multi-wrapped in Cellophane

on a SCANDIA*
Model SFT

The Facts —

100-A-MINUTE for multi-packs is standard performance on these popular packs. They are wrapped WITHOUT cardboard bases; require 30% LESS cellophane than other automatic machines because of Scandia's thrifty style of wrap and have many operating advantages — like the movable heat-sealers which automatically move away from the packages whenever the machines are stopped, thereby preventing scorching or "cooking" of the product.

No production executive, contemplating increased production at lower cost, can afford to plan until he has seen smooth-running, quiet, fast and thrifty Scandia's at work . . .



*made under Bronander patents.

Scandia

MANUFACTURING COMPANY
NORTH ARLINGTON, NEW JERSEY

- ★ Saving 30%
cellophane —
- ★ without using
any cardboard



REGISTERED TRADE NAME

CARTONERS Give You

If you package solid, non-sifting items, it will pay you to investigate the advantages offered by CECO Adjustable Cartoners.

CECO Cartoners are quickly adjustable for short or long runs of different sizes and types of cartons by inexperienced help without special tools. Cartons may be glue-sealed both ends, sealed one end and tucked in on the other, or tucked in on both ends. Simple construction assures low upkeep. Machines are mounted on casters to permit shifting around to different departments, as needed.

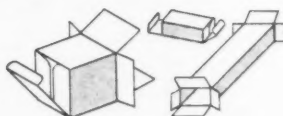
Let us show you how a CECO Cartoner will pay you back its low initial cost within one year out of savings in labor alone.

★ Greater Adjustability

	LENGTH	WIDTH	DEPTH
from	5 1/8"	5 1/8"	1 7/8"
up to	10"	6"	30"

★ Choice of Closures

Glue Sealed
or Tucked
or Both



★ at LOWEST COST



CECO MODEL 45
Adjustable
Fully Automatic
Low Cost Cartoner

CECO Models

MODEL	CARTON OPENING AND FEEDING	PRODUCT INSERTION	SEALING IN, OR TUCKING
45	Automatic	Automatic	Automatic
40	Automatic	Manual	Automatic
3901	Manual	Manual	Automatic

All CECO models can be arranged to glue-seal both ends, seal one end and tuck in the other, or tuck in both ends. Range of adjustability can be varied as required.

SEND FOR CECO BULLETIN

CONTAINER EQUIPMENT CORPORATION

MEMBER, PACKAGING MACHINERY
MANUFACTURERS INSTITUTE

214 Riverside Avenue

Newark 4, N. J.

Baltimore • Chicago • Jackson • Pittsburgh • Rochester
St. Louis • San Francisco • Savannah • Toronto



Take the Pretty One, Mommy!

And Mommy buys it, because she knows that the "pretty one" is also the freshest one. Shelf appeal—plus protection! Protection—plus shelf appeal! That's the "Beauty at Work" value of Cochran's Aluminum Foil for numberless packaging uses. Wrappers made with Cochran Foil seal in goodness and flavor—they preserve and protect while their striking beauty attracts and sells.

Cochran's Aluminum Foil may well fit into your packaging needs. We will be happy to refer your inquiries to qualified package manufacturers for a comprehensive study of your requirements.



Cochran

COCHRAN FOIL COMPANY
INCORPORATED
LOUISVILLE 10, KENTUCKY

SALES OFFICES • 3318 East Lake Street • 432 Fisher Building • 500 Fifth Avenue • 238 West Wisconsin Ave. • Hippodrome Bldg.
Minneapolis 4, Minn. • Detroit 2, Michigan • New York 10, New York • Milwaukee 3, Wisconsin • Cleveland 15, Ohio



Stoway's NEW
GASKET-SEAL
 CONTAINERS

**For More Sales ...
 Greater Re-use Appeal**

For the first time in the packaging industry an all plastic, airtight twist-seal container with a synthetic rubber gasket seal!

Your products packaged in Stoway containers will have the powerful selling combinations of **COLOR** and **VISIBILITY OF PRODUCT ... PLUS RE-USE OF CONTAINER** which is backed by **PROVEN CONSUMER DEMAND!**

For further information and prices write ...

**SOUTHERN CALIFORNIA
 PLASTIC COMPANY**

1805 FLOWER ST. • GLENDALE • CALIFORNIA



Made of odorless, tasteless, chip-proof Styron. • Withstands heat to 160°F., cold to -40°F. • Slight twist of the lid makes an airtight seal. • Fits all automatic packaging equipment. • Available in a wide choice of colors and combinations. • Sizes: 5, 8, 12 and 16 ozs.

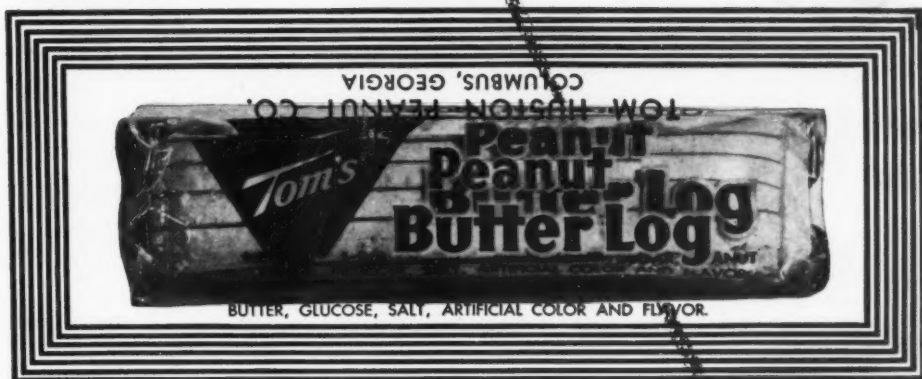
**Stoway Containers
 Stimulate Sales!**

PRINTED BY STANDARD

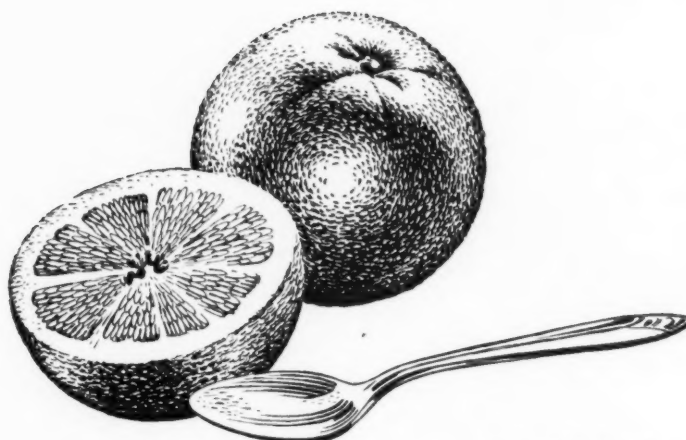
There is no finer printing on either cellophane or glassine. And "printed by Standard" means absolute uniformity from run-to-run.

Standard printing company

PRINTERS OF CELLOPHANE and GLASSINE SINCE 1936
COLUMBUS, GEORGIA



BUTTER, GLUCOSE, SALT, ARTIFICIAL COLOR AND FLAVOR.



Nature does it Well...

West Carrollton GENUINE VEGETABLE Parchment

does it Better!

Natural flavor is protected by nature for a short time only. West Carrollton Genuine Vegetable Parchment protects foods as long as necessary. It is ODORLESS, TASTELESS, GREASE RESISTANT and INSOLUBLE. Complete facilities in our own plant for printing in one or more attractive colors (*with special inks.*)

DRY WAXED PARCHMENT

BUTTER WRAPPERS

BUTTER TUB LINERS
& CIRCLES

BUTTER BOX LINERS



LARD CARTON LINERS

MILK & ICE CREAM
CAN TOPS

SLICED BACON WRAPPERS

OLEOMARGARINE
WRAPPERS



VEGETABLE SHORTENING

CARTON LINERS

CELERY WRAPPERS

FISH FILLET WRAPPERS
& INSERTS

MEAT WRAPPERS



LINERS FOR MEAT TINS

POULTRY WRAPPERS

CHEESE WRAPPERS

TAMALE WRAPPERS

MANY OTHERS

WEST CARROLLTON PARCHMENT COMPANY • WEST CARROLLTON, OHIO




Artist — Herald G. Miller, native of Utah

UTAH—annual purchases: \$620 million, mostly packaged.

CONTAINER CORPORATION OF AMERICA





For a touch of packaging excellence
many prominent manufacturers specify
Carr-Lowrey opal jars.

**CARR-LOWREY
GLASS CO.**

Factory and Main Office: BALTIMORE 3, MD. • New York Office: 40 W. FORTIETH ST. • Chicago Office: MERCHANDISE MART



A reasonably priced, re-use container
for fruitcakes, candied fruits, etc.
8" diameter 3 1/2" deep.

Amos ... Steps up your sales! down your costs!

Yes, it will pay you to *come to Amos FIRST*...

For a *step-ahead* packaging service that is *complete*...
competent... *convenient*!

Not only do Amos plastic packages have the *beauty* that buyers go
for—but they also possess the *utility* that users appreciate and
remember long after the initial purchase is forgotten.

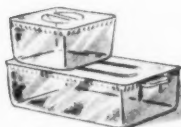
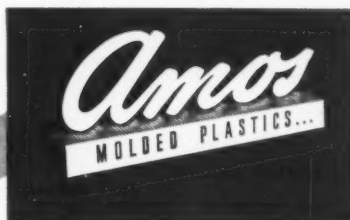
So, whether your requirements be *large* or *small*—if your problem
today is one of stepping *up* sales and stepping
down costs—the solution is simple...

Just bring your packaging problem to...

Write for our new 52-page booklet,
picturing in full color the sales and
engineering ideas developed by Amos
for every industry

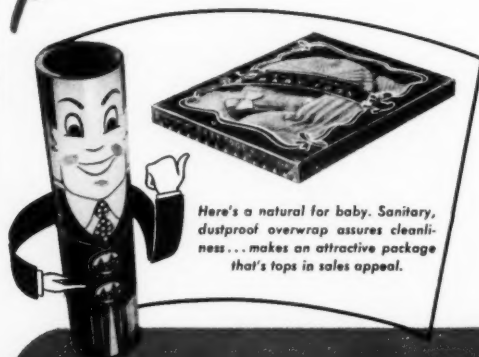
The industry's leading molders of distinctive plastic packages...

Visit us at the National
Plastics Exposition,
Navy Pier, Chicago
March 28-31





*Only
cellophane
gives you so much
for your
packaging dollar*



*Here's a natural for baby. Sanitary,
dustproof overwrap assures cleanli-
ness... makes an attractive package
that's tops in sales appeal.*

Just the qualities you
need for a successful package!

That's the reason for the widespread acceptance of
Sylvania Cellophane types P-1 and MS for
wrapping shirts, sheets, hosiery and other dry goods.

This cellophane offers you true transparency—
sparkling clarity and sales appeal. Here is
uniform strength that stands up under automatic application,
shipping, and retail handling. Here is dust protection—
the sanitary qualities so important in selling
personal items.

The Sylvania representative will see that you get
the right combination of properties you need for
successful packaging. Talk over your packaging
problems with him or write to Market Development,
Dept. **MP-2**, for information mentioning the
specific application in which you are interested.

You will find us most cooperative.

SYLVANIA CELLOPHANE

SYLVANIA DIVISION AMERICAN VISCOSE CORPORATION

Manufacturers of cellophane and other cellulose products since 1929

General Sales Office: 1617 Pennsylvania Blvd., Philadelphia 3, Penna. Plant: Fredericksburg, Va.



[illegible]

The Pedigree is Assurance of Thoroughbred Stock

Add all these *extra* assurances of consistent quality, dependable service and fair price and it's easy to see why every month more makers of national brand products are shipping in Union boxes.



UNION Corrugated Containers

UNION BAG & Paper Corporation

Corrugated Container Plants: SAVANNAH, GEORGIA • CHICAGO, ILLINOIS • TRENTON, NEW JERSEY

fishing for the right adhesive?

When you call Stein Hall you know there's a specific Waterproof Glue to fill your individual packaging needs.

Take advantage of these two Stein Hall exclusive developments:

- Stein Hall Waterproof Glues run clean at top speeds
- Stein Hall Waterproof Glues give off no odors

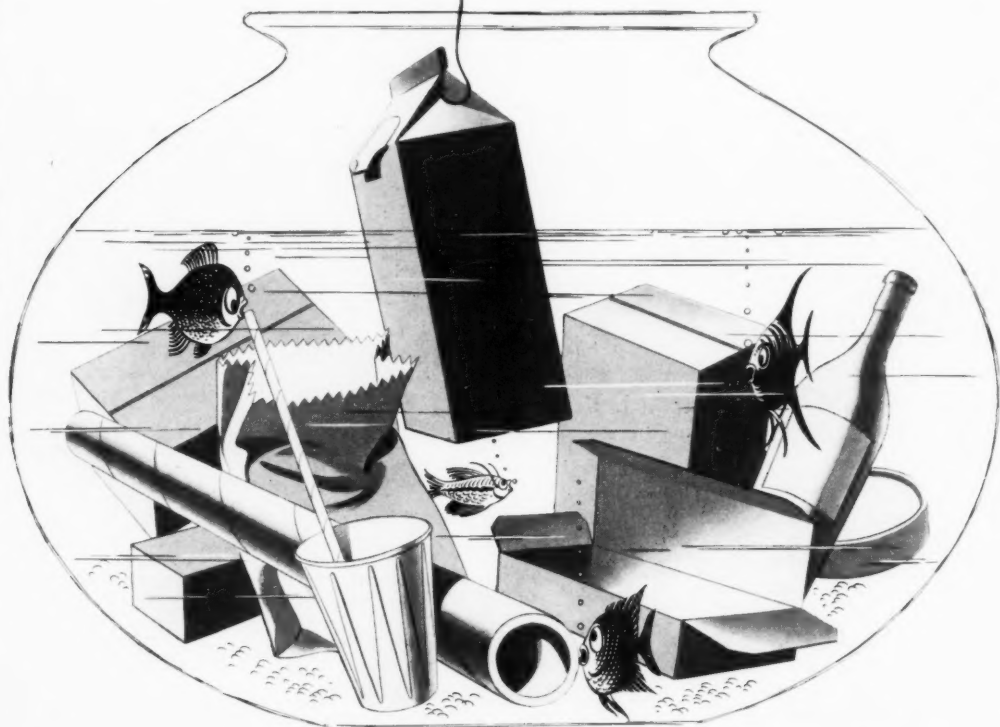
Dampen or drench 'em. With Stein Hall liquid glues they're glued to stay.

For tubes or packages, bottles, boxes or bags,

Stein Hall can lick your packaging problem.



Branch Offices in 16 U. S. cities and Canada





you get

SPARKLE plus

The sparkling Aluminum Foil wrapper* on this Brach's Mint Bar makes it a standout at the point of sale. And for protective qualities, here's what the manufacturer says: "Brach's... freshest bars on the counter! Bright foil wrappers protect their extra goodness."

Interested? We'd be glad to furnish you the names of leading package manufacturers, experienced in designing better packages using Alcoa Foil. Just write ALCOA COMPANY OF AMERICA, 1760B Gulf Bldg., Pittsburgh 19, Pa.

locked in flavor and freshness

with packages of

ALCOA
ALUMINUM FOIL



*Wrapper manufactured by Milprint Corp., from Alcoa Aluminum Foil



} choose US

Dollar-wise thinking made the packers of the products illustrated below come to U.S. for the machine that would best fill their needs.

The well-known SCOTT Net Weigher is designed for weighing and filling free-flowing and semi-free-flowing materials. It can be furnished in semi-automatic and fully automatic models, the latter both straight line and rotary, with speeds up to 60 packages per minute. The basic SCOTT Scale, with its solenoid-actuated tripping mechanism and precision craftsmanship, is the fastest and most accurate single dump net weigher in existence.



SCOTT Line: Coffee (bean and ground), rice, barley, beans, sugar, tea, nut meats, corn meal, crackers, cracker crumbs, dog food, elbow macaroni, grass seed, etc.

For non-free-flowing powdered items, there is the BOND Filling Machine. The BOND machine has not rested on its reputation, established many years ago. Today this line includes the most modern, high speed, fully automatic filling machines, capable of speeds up to 120 containers per minute. There are semi-automatic models too, for use where production is low or where there is a wide diversity of products and sizes.



BOND Line: Cocoa, chocolate and malt drink mixes, ground spices, cake and muffin mixes, baby food powders, etc.

Won't you send us samples of your products? We'd like to have the opportunity of recommending the U.S. machine to suit your particular requirements.



NET & GROSS WEIGHING ★ PACKAGE FORMING & FILLING ★ CARTON SEALING, LINING, WRAPPING ★ BOX MAKING

AUTOMATIC BOX MACHINERY CO., INC.

Owning and Operating NATIONAL PACKAGING MACHINERY CO. ★ CARTONING MACHINERY CORP.

122 ARBORETUM ROAD, ROSLINDALE, BOSTON 31, MASS.

Branch Offices: New York ★ Cleveland ★ Chicago ★ San Francisco (Mailler-Searles, Inc.)

Glorify

MEN'S SHIRTS

with the **NEW**

DENT-O-PAK

Pliofilm **BAGS!**



Here is a really NEW type of packaging that combines better protection, easier handling and better display with a new re-use feature that is a real "plus" in merchandising.

Because these NEW Dent-O-Pak bags are made of tough, durable Pliofilm, they do not tear at the slightest break, or get discarded as torn before the merchandise even reaches the consumer.

EXCLUSIVE ADVANTAGES OF DENT-O-PAK BAGS



EASY TO INSERT

Just hold bag open by header, insert merchandise and tuck in flap.



EASY TO REMOVE

Just pull out flap, take out merchandise and put back in an instant.

The New Dent-O-Pak "Flap" Header makes filling the bags easier and faster. Flap can be opened and closed like an envelope so that the shirt may be taken out to show a customer, then replaced easily and quickly.

Customer may keep shirt in bag at home, insuring fresh, clean, unrumpled garments...a selling "plus" of first importance. Ideal for traveling.

MAIL COUPON FOR DETAILS NOW!

Please send samples and information on packing

(name products) _____

Name _____

Address _____

City _____ Zone _____ State _____

REPRESENTED BY

LESTER S. WADE
3124 N. E. Fremont Street
Portland 12, Oregon

L. H. BRANDL
611 Almerica Avenue
Coral Gables, Florida

KIRBY SALES COMPANY
1256 Factory Place
Los Angeles, California

BAG SERVICE, Inc.
100 Warren Avenue
New York 17, N. Y.

HARRY WALKER
P. O. Box 505
Moultrieville, S. C.

WALTER A. MENSOR
Route 2
Crown Point, Indiana

UGHTRED SALES COMPANY
307 Exchange Building
Denver 2, Colorado

GEORGE D. UNDERWOOD
634 M. & M. Building
Houston, Texas

H. HERRMANN ASSOCIATES
P. O. Box 272
Drayton Plains, Michigan

GEORGE UNDERWOOD, Jr.
309 N. Medina Street
San Antonio, Texas

R. P. ANDERSON COMPANY
for New Mexico, Oklahoma,
Arkansas, Louisiana and
Mississippi

317 Texas Bank Building
Dallas 2, Texas

CHESTER L. MOORE & SONS
910 So. Pearl Street
Dallas, Texas

CHARLES H. HULGEN ASSOCIATES
15 Lombard Street
Philadelphia 47, Pa.

BUNN PACKAGING MACHINERY CO.
7602 So. Greenwood Ave.
Chicago 19, Illinois

The DENTON Corporation

2124 LIVINGSTON STREET, OAKLAND 6, CALIFORNIA • KELLOG 4-5615

Any of these cans fit your product?



If not, you can be sure some one of the dozens of other Continental cans, pails or drums will fit your requirements. Whenever you're ready, we'd like to show you what we can do for you. Here at Continental we relish packaging problems that are really "toughies." Our technical staff gets a kick out of fitting packages to products, shipping requirements and sales conditions. For example, the "Tripletite" paint can shown above not only gives extra protection to the product but can readily be reclosed. Our lithographers have an old-fashioned pride in their work that shows up in crisp, colorful design. And since we have plants all across the country, we sincerely believe we can give you a new idea of service. Give us a call!

*You can't beat
Continental as
a dependable
source of
supply!*

CONTINENTAL CAN COMPANY

100 East 42nd Street

New York 17, New York

these fish land customers!



No ordinary lure separates the customer from his money these days. Here you see Milprint's beautiful multi-color printing on Cellophane, ushering in a new era in seafood merchandising.

Like products in a dozen fields, frozen fish fillets are an impulse item that must pack plenty of "buy-me-now" appeal. Which means the package must be an eye stopper, get over brand and product identity quickly and carry instructions for the product's use.

No matter what you package—seafoods or textiles, candy or tobacco—Milprint—the nation's foremost packaging organization, can help you build in more sales lure. Why not call your local Milprint man today?

Use Milprint

"follow thru" service

Booklets, car cards, wall and window displays help sell your packaged products. Milprint can plan and produce them all for you.

*This insert printed by Milprint, Inc.

Printed Cellophane, Pliofilm, Acetate, Glassine, Plastic Films, Foils, Saran, Folding Cartons, Lithographed Displays, Printed Promotional Material



Milprint INC

PACKAGING MATERIALS

LITHOGRAPHY & PRINTING

GENERAL OFFICES MILWAUKEE, WISCONSIN

SALES OFFICES IN ALL PRINCIPAL CITIES



POWDERS

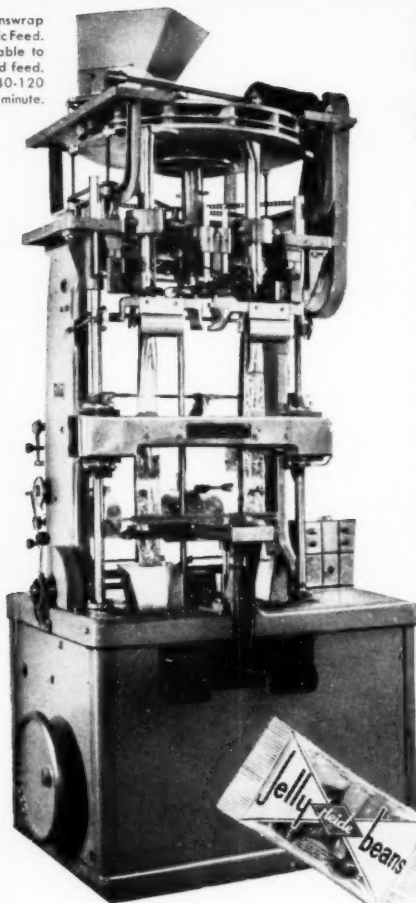


TABLETS

FREE FLOWING
SOLIDSLIQUIDS OR
SEMI-LIQUIDS

TRANSWRAP

Model "B" Transwrap
with Volumetric Feed.
Also adaptable to
auger or liquid feed.
Produces 40-120
pkgs. per minute.



AUTOMATICALLY COMBINES MINIMUM PACKAGE COST WITH MAXIMUM VERSATILITY

In one machine, TRANSWRAP is a self-contained "packaging department." Using cellophane, Plia-film, glassine, roll foil or other suitable heat-sealing materials, it forms, fills and seals your package completely automatically.

The same TRANSWRAP machine with suitable feed assembly can package 1 aspirin tablet or 1 lb. of peanuts . . . 1 teaspoon of vanilla extract or 1 lb. of margarine . . . 5 grams of salt or 16 oz. of powdered milk. Package sizes possible range from $\frac{3}{8}$ " x 2" to $5\frac{1}{4}$ " x 13". They may be either pillow, or "fin seal" type (sealed around four edges).

From the standpoint of economy, TRANSWRAP adjustments and operation are so simple, a single operator can handle a whole battery of machines. Attractive, sales-conditioned TRANSWRAP packages, filled and sealed, actually cost less than ready-made empty bags.

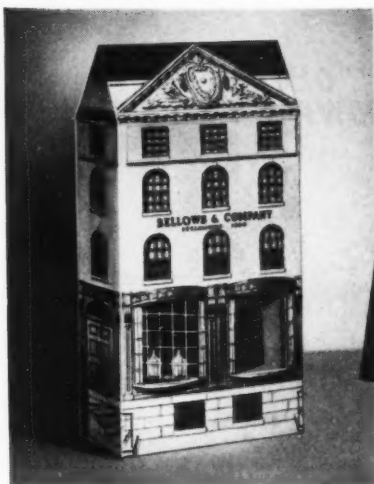
Custom-engineered adaptations are possible on any TRANSWRAP machine to meet your individual requirements with maximum efficiency.

WRITE FOR FREE ILLUSTRATED BROCHURE

Manufactured and Sold by
**TRANSPARENT WRAP
MACHINE CORPORATION**

Route 17 and Henry Street
Hasbrouck Heights, New Jersey
REPRESENTATIVES IN PRINCIPAL CITIES
OF THE U. S.





More store displays—and then some! Package goods stores welcomed this unique, two-purpose "Display House" carton which Gardner developed in cooperation with Bellows & Company. They gave it up-front display because it was new, fresh, different—and because it stimulated two-bottle sales of Bellows' famous goods.

A saving of $\frac{1}{4}$ to $\frac{1}{2}$ in over-all carrier costs! That's what Gardner's "Ring-Style" carrier accomplished for Coca-Cola bottlers. It was a pioneering approach to the six-bottle carry-out package for Coca-Cola.* And it's not surprising that the "Ring-Style," of all new type carriers, became the volume leader in one short year!

*"COCA-COLA" and its abbreviation "Coke" are the registered Trade Marks which distinguish the product of The Coca-Cola Company.



Can we help you?

Do you have an old package that needs a face-lifting to today's self-selling trend? A new idea that needs a new packaging idea? A product that's "hard to package," or a product that has never been packaged? Let Gardner packaging experts tackle your problem. Your inquiry will be welcomed. No obligation, of course.



Showing: Increased impulse sales, lower handling costs, more store displays, greater two-unit sales... through intelligent packaging engineering and design



It increased sales 35% — with no special promotion or extra sales effort. And that's not all—this shipping-display carton, created by Gardner, cut packaging time 70% for Rogers Imports, Inc.



It made more infants' shoes "walk out of the stores." Sears, Roebuck and Company wanted a smart, colorful package that would put "oomph" into their Biltwel Infant Shoe sales. Gardner not only came up with an ingenious "Kliktop" folding carton that had eye-appeal, but one with a fold-up handle that transformed it into a tiny "suit case" which toddlers love to carry from the stores. Incidentally, this colorful, new carton costs less than the old, orthodox kind.

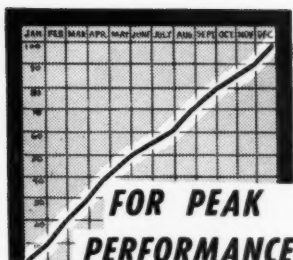


Solved an Inside and Outside Problem! The job was to assemble the component parts of the revolutionary Shellie Nurse into an attractive display kit—one easy to assemble in the factory, easy to unpack in the store or home. This Gardner carton solved that problem for The Shellmar Products Corporation.

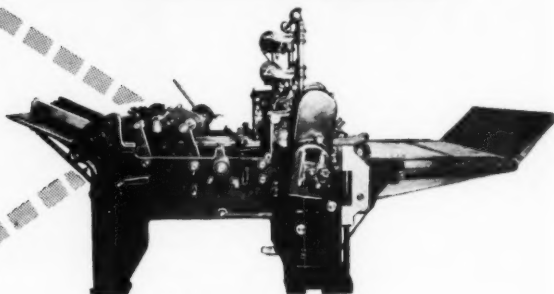
THE GARDNER BOARD AND CARTON CO.

Manufacturers of Folding Cartons and Boxboard, Middletown, Ohio

Sales Offices in Boston, Chicago, Cleveland, New York, Philadelphia, Pittsburgh, St. Louis



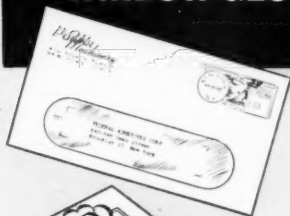
ON ANY WINDOW PATCH MACHINE



Model CC-B Window Applying Machine by International Paper Box Machine Co., Nashua, N. H.



- Non-Inflammable
- Non-Wrinkling
- Dries Rapidly
- Holds Permanently
- Adheres Transparent Windows to Both Paper and Board



Federal Transparent Window Glue #17W is a vast improvement over lacquer type adhesives. It's ideal for use on Staude, International, and F. L. Smithe window patch machines.

It operates cleanly, tacks immediately, and holds permanently. It's water-miscible and will not bleed the ink. Available either in the natural white or with a green pigment to show the glue line.

You'll find Federal Transparent Window Glue #17W a superior adhesive that's ideal for Lumarith, Kodapak, Sylvania PMS and Dupont CA, LT, MP & MST Cellophane Windows.

WRITE FOR COMPLETE INFORMATION

Glues • Pastes • Gums • Resins • Non-Warp Glues
Starches • Dextrines



FEDERAL ADHESIVES CORP.

"We Stick Everything But You"

640-646 Dean Street • Brooklyn 17, N. Y.
Cleveland • Boston • Philadelphia

Ever since the Gibson Girl



...quality products have sold in fine
Rowell set-up boxes.



...and today, just as 50 years ago, the fresh,
clean-cut line and expert craftsmanship and
color printing of a Rowell container provides
the eye compelling, desire creating combination
that leads to sales and repeat sales.

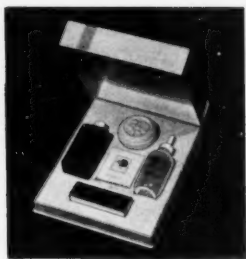


E. N. Rowell Co. Inc.
Manufacturers of Fine Paper Boxes
BATAVIA, N. Y.

LATEST IN PLASTICS PACKAGING



NEW STOCK MOLD — the Plax square — is now available and can be supplied in natural polyethylene and in color. Bottle design offers the eye appeal of a distinctive shape plus the economy of a standard mold. Plax produced it to meet an insistent demand for this type bottle design.



MOTHERS WILL appreciate the added convenience and safety provided by the Plaxpak dispenser bottle in the Breck Baby Gift Package. Unbreakable and squeezable, the polyethylene bottle is an attractive and uniquely practical accessory. It's quiet, too.



ALEXANDRA de MARKOFF'S Fragrant Fern talcum powder is packaged in a four-ounce Plaxpak bottle of natural polyethylene. A truly feminine dusting of powder is effected by a slight squeeze of the bottle — one of the numerous features of Plaxpak bottles.



NEW GOGGLE CASE developed by American Optical Company will not scratch the lenses. Light, tough Plaxpak polyethylene film is used for the front and back of the case. This material is not affected by oil or grease and can be easily cleaned.



STORMY WEATHER never catches unprepared the owner of a Howard Plastic Rain Hood. Both the hood and its envelope are made of tough, moisture-proof Plaxpak polyethylene film. The compact plastic rain kit can be tucked away in any corner of a purse.



COSTS ARE SLASHED when bulk chemicals are shipped in drums or cartons with inner liners of Plaxpak polyethylene film. No leakage. Product integrity protected. Scholler Brothers, Inc., uses inner liners fabricated by U. S. Envelope Company.

Many new packaging ideas have been made possible by Plaxpak bottles and film. Still newer ones are in the offing. Plaxpak has become a synonym for new packaging opportunities. These opportunities can be applied to your product. Please write Plax for details.

For your greater convenience, Plaxpak polyethylene bottles are now being handled by the following distributors: PHILADELPHIA, Zuckerman-Hanickman, Inc.; BROOKLYN, N. Y., J. Rabinowitz & Sons, Inc.; CHICAGO, Continental Glass Co.; BOSTON, S. H. Ansell & Sons; ST. LOUIS, Northwestern Bottle Co.; LOS ANGELES, Container Service Co.

PLAX BLOW-MOLDED PRODUCTS ARE MADE UNDER THE FOLLOWING U. S. PATENTS 2128239, 2175013, 2175054, 2230188, 2230190, 2260750, 2282751, 2349176, 2349177, 2349178

★ In addition to its packaging products, Plax makes a wide variety of thermoplastics in rod, sheet, tube, and other forms.



PLAX CORPORATION DIVISION, HARTFORD-EMPIRE COMPANY P. O. BOX 1019, HARTFORD 1, CONNECTICUT
In Canada, Canadian Industries, Ltd., Montreal
Offices in New York City, Syracuse, Philadelphia, Chicago and St. Louis

NOW: ADDED SERVICES ON PLAXPAK BOTTLES

DESIGN...

Expert, prompt consultation is available on special shapes. Design problems are handled by our design staff, and by a leading industrial designer.

MERCHANDISING SERVICES...

These services are designed to help manufacturers take full advantage of the merchandising features inherent in the Plaxpak polyethylene bottle.

TECHNICAL SERVICES...

These services cover all technical phases involved in the use of the Plaxpak polyethylene bottle, in respect to requirements of specific products.

EXPERIENCED DISTRIBUTORS...

These firms carry warehouse stocks for immediate delivery of Plaxpak bottles in Boston Round shape. They are also ready to assist on special designs.

PHILADELPHIA, Zuckerman-Monickman, Inc.
BROOKLYN, N. Y., J. Rabinowitz & Sons, Inc.
CHICAGO, Continental Glass Company;
BOSTON, S. H. Ansell & Sons
ST. LOUIS, Northwestern Bottle Company
LOS ANGELES, Container Service Company



REGIONAL SALES OFFICES

You can contact Plax representatives in New York City, Philadelphia, Syracuse, Chicago, and St. Louis.



PLAX CORPORATION DIVISION, HARTFORD-EMPIRE COMPANY P. O. BOX 1019, HARTFORD 1, CONNECTICUT
In Canada, Canadian Industries, Ltd., Montreal

Plax blow-molded products are made under the following U. S. patents: 2128238, 2175053, 2175054 2230188 2230190 2260750, 2283751, 2349176, 2349177, 2349179



JUST ANY CAP WON'T DO



*Another Gutmann Specialty Closure

SHEAFFER'S *Scrip* "Magic Circle Cap"*

A COMPOSITE LINER

with an impermea-
ble center and ab-
sorbent outer ring.



ABSORBENT OUTER RING

absorbs excess ink left on lip of bottle
thus retarding corrosion of cap, or liner

Just any screw cap won't give your product any selling advantage whatever.

Screw caps that seal and sell must be engineered for your product as a *special* part of the package designing job by a manufacturer whose only interest is the *closure*.

That is why Ferdinand Gutmann & Co. developed, in addition to its standard line of screw caps, many types of specialty closures that *protect* your product best — please your customer most.

Most widely used among these specialties is Filma*-Seal, the economical inner seal which is applied with the Gutmann cap . . . stays on *after* the cap is removed.

Filma*-Seal gives your glass packed product extra sales appeal and extra protection against evaporation, moisture ingress, air ingress, tampering or sampling. We have already developed 28 variants of Filma*-Seal to solve specific problems for manufacturers who package in glass. We will develop the 29th variant for you . . . if you need it . . . and see it through your plant whether you package thousands or millions.

**For closures that sell . . . CALL A
CLOSURE
MANUFACTURER . . .
Call
Gutmann**

Filma*-Seal
CAP AND SEAL APPLIED AS ONE
*Reg. U.S. Pat. Off. and abroad



FERDINAND Gutmann & COMPANY
SINCE 1890

3601 14TH AVENUE • BROOKLYN, N. Y.

MODERN PACKAGING

WANTED: Aniline Ink Problems



...for this shirt-sleeved BBD specialist to solve

Does your printing suffer from dull, lifeless colors that lack snap and brilliance? Are you plagued with smudged, smeared, mottled prints? Maybe it's drying, trapping or adhesion that cause your sleepless nights? Or, perhaps, you simply aren't satisfied with the "mileage" you're getting from the inks you use.

Whatever your problem — be it complex or of the common garden variety — odds

are your local BBD field man can help you overcome it. For, remember—the BBD man is an *aniline ink* specialist with practical pressroom experience. And he's backed by a company whose specialization in this field has made it the largest producer of aniline inks in the world!

Call in the BBD man. He'll be glad to roll up his sleeves and show you—on your own press—the way to better printing.

BBD ANILINE INKS — famous for rich, brilliant colors . . . even, dense coverage . . . sharp, clean printing . . . and more coverage per pound.

Bensing Bros. and Deeney

LARGEST MANUFACTURERS OF ANILINE INK IN THE WORLD

401 N. BROAD STREET, PHILADELPHIA 8, PA.

Associated Manufacturing Plants: 81 Albion Street, Wakefield, Mass.; 2358 N. Seeley Ave., Chicago 47, Ill.

Export Division: McLaurin-Jones Co.; 22 East 41 Street, New York 17, N.Y.

Distributors: A. M. Bojanower, 5270 E. Washington Blvd., Los Angeles 22, Cal.; Manton Brothers, Elizabeth Street, Toronto, Canada

**make
multi-wall
bags
extra-protective
with**

"LINERS OF LOXOL"*

IS YOUR PRODUCT LISTED?
These items need "Liners of Loxol"

Fertilizers
Resins
Ionic Exchange Resins
Special Cements
Calcium Chloride
Humus
Peat Moss
Caustic Soda
Phosphates
Magnesia
Silica Gel
Asphalt Sealing Compounds
Beta Naphthol
Brown Sugar
Cellulose Acetate
Compost
Detergents
Meat Trimmings
Mono Sodium Phosphate
Polyethylene
Vinylite
Saran
Powdered Milk
Quick Lime
Urea Resins

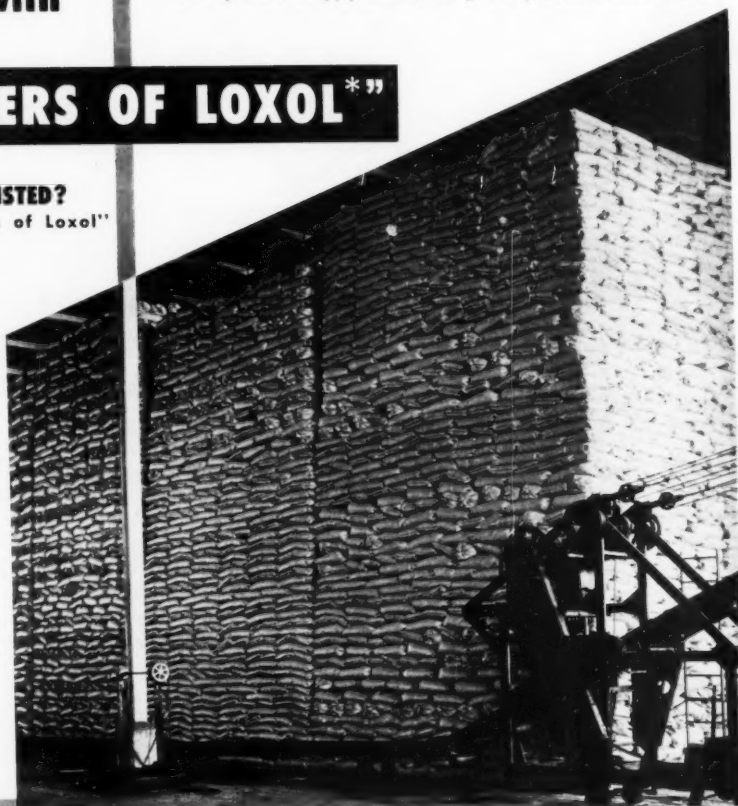
Multi-wall bags with "Liners of Loxol" give products packed in them the ultimate in protection from contamination and from loss or gain of moisture and volatiles. In addition, Loxol is inert...it's an ideal material for packaging caustics and other products which affect or combine with ordinary container materials. That's why many leading users of multi-wall bags specify "Liners of Loxol" when ordering from their bag suppliers.

Loxol consists of high tensile strength kraft which is coated with polyethylene. The polyethylene and paper are permanently united by a unique process that guarantees against delamination and pinholes.

Loxol gives lower MVTR with less coating. And the polyethylene surface of Loxol makes bags that are both chemically inert and greaseproof.

What's more, Loxol is sold *by area*, not by weight...you pay only for what you need! Loxol is presently available on base papers of 40# and heavier, with coatings from 1/2 to 10 mils thick.

Write today...we'll recommend an experienced converter in your vicinity who can supply multi-wall bags with protective liners of Loxol.



Loxol has all these qualities

- won't delaminate
- no pinholes
- unvarying MVTR
- great strength
- inertness
- economy

*Reg. T.M.

PHOTO, COURTESY BAGPACK DIVISION,
INTERNATIONAL PAPER CO.



H. P. SMITH PAPER CO.
MANUFACTURERS

5001 WEST SIXTY-SIXTH ST., CHICAGO 38, ILL.

INDICATORS - LAMINATED - 40#
COVERS - PAPER - FABRIC - 40#

COLUMBUS STORE MANAGER—"It is my opinion that the packaging should be given half the credit for the success of the promotion"

HOUSTON BUYER—"It's a complete sell-out! We bought \$1,800 worth on the initial order . . . sold it within a matter of days . . . then reordered all we could get"

MILWAUKEE DEPARTMENT HEAD—" . . . the packaging was the whole selling point of the promotion . . . made it easy to show the customer . . . eliminated mark-downs"

OKLAHOMA CITY BUYER—"The color and the gift box did the trick"

PITTSBURGH BUYER—"The package is important . . . one of the key factors in the success of the violets promotion . . . it practically sold itself"

DAYTON BUYER—" . . . the package would be worth including if it added a dollar a dozen to the cost of the merchandise"

BIRMINGHAM DEPARTMENT HEAD—" . . . the gift box idea would have sold merchandise less attractive than 'violets in the snow' "



Lumarith packaging helped make this promotion a sell-out within hours! Check with a Celanese representative about the sales power of transparent packaging with Lumarith. He can direct you to sources of supply for custom-made and stock boxes. Celanese Corporation of America, Plastic Division, Transparent Films Dept. 8-B, 180 Madison Avenue, New York 16.

Celanese
PLASTICS

*Reg. U. S. Pat. Off.

NATIONAL PACKAGING EXPOSITION APRIL 24TH-27TH, NAVY PIER, CHICAGO, CELANESE BOOTH 204.



Visit our
Booth No. 208
at the 19th Natl.
Packaging Exposition
Navy Pier, Chicago

**CLEVELAND
CONTAINER....**

Packaging

Offers You Eye-Compelling Attractiveness.

The two packages shown here are widely different types...both excellent for many uses.

(Above) Our #4 Type Friction Plug can available in diameters $1\frac{19}{32}$ " to $6\frac{3}{4}$ ". Lengths as desired.

(Below) Our Telescope Type container with curled and disced top and bottom. Available in diameters $\frac{3}{16}$ " and up. Lengths as desired.

Cleveland Containers aid in selling endless products from soap to insecticides, seeds, chemicals, pastes, tacks, compounds, etc., each container so unique in its adaptability to meet tomorrow's needs, that increased sales inevitably result.

Ask us for samples and suggestions on new ideas to help improve the packaging of your products.

The CLEVELAND CONTAINER Co.

6201 BARBERTON AVE. CLEVELAND 2, OHIO

- All-Fibre Cans • Combination Metal and Paper Cans
- Spirally Wound Tubes and Cores for all Purposes

PLANTS AND SALES OFFICES: Cleveland, Detroit, Chicago, Plymouth, Wisc., Jamesburg, N. J., Odensburg, N. Y. • ABRASIVE DIVISION at Cleveland
SALES OFFICES: Grand Central Terminal Bldg., New York City; Washington Gas Light Bldg., Washington, D. C.; West Hartford, Conn.; Rochester, N. Y.
Cleveland Container Canada, Ltd., Prescott, Ontario • Offices in Toronto and Montreal



Nowhere else in the world is so much candy manufactured



One of the most important aspects of Chicago's food processing activities is its world leadership in the manufacture of candy.

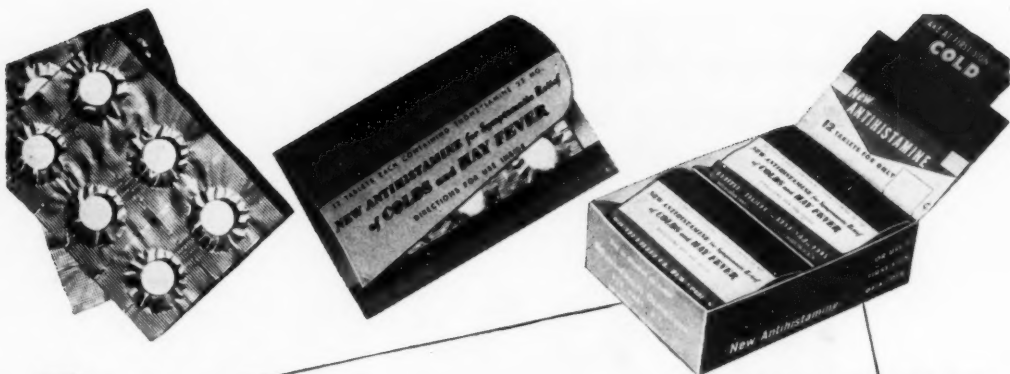
More than 95% of Illinois' \$299,713,000 candy production comes from Chicago area manufacturers. In 1948, they accounted for 31% of the nation's \$944,925,000 candy output. Many factors contribute to Chicago's leadership in the candy industry. Essential ingredients . . . milk, butter, eggs, corn syrup and fruits are immediately available from the rich dairy, farm and orchard lands of the surrounding area. Unparalleled rail, water, highway and air transportation brings to the city the sugar, nuts, spices, oils and fruit from all over the world. Added to these are the advantages of the city itself, where specialized equipment for candy cooking, plentiful labor of every degree of training, skilled nutritional research resources, plus expert merchandising and distributing facilities, are ever abundant. The diversity of Chicago's candy products, from the finest packaged goods to the children's penny favorites, reflects the tremendous and varied resources available here to the candy industry. Numerous other industries enjoy similar benefits from location in the Chicago area. Should you wish information concerning Chicago's advantages for your business, we will gladly furnish you a confidential survey of conditions here, as they apply to your specific problem. There is no obligation, of course.

Industries in the Chicago area have these outstanding advantages: Railroad Center of the United States • World Airport • Inland Waterways • Geographical Center of U. S. Population • Great Financial Center • The "Great Central Market" Food Producing and Processing Center • Leader in Iron and Steel Manufacturing • Good Labor Relations Record • 2,500,000 Kilowatts of Power • Tremendous Coal Reserves • Good Government • Good Living • Good Services for Tax Dollars.

TERRITORIAL INFORMATION DEPARTMENT

Marquette Building—140 South Dearborn Street, Chicago 3, Illinois—Phone RAndolph 6-1617

**COMMONWEALTH EDISON COMPANY • PUBLIC SERVICE COMPANY OF NORTHERN ILLINOIS
WESTERN UNITED GAS AND ELECTRIC COMPANY • ILLINOIS NORTHERN UTILITIES COMPANY**



This is packaging service at IVERS-LEE

Mr. L. I. Volckening,
Ivers-Lee Incorporated,
215 Central Avenue,
Newark, New Jersey.

Dear Mr. Volckening:—

I think we have made a new record in putting a new product on the market. From the day of the first decision to market the product, until the first sales package was ready for delivery, was exactly thirty days! This could not possibly have been accomplished without the wonderful cooperation and assistance of the men in your company. I would like to say this to each one personally, but since I am unable to do that, I ask you to extend the same thanks to them.

What We Did—Within 10 days after this packaging problem was brought to us, we were in production, and within 10 days more we were shipping to the customer — over 2½ million tablets per day (a) in Sanitape-Sealtite (b) in a special, laminated, transparent, moisture-proof material (c) in catch-covers of 12 tablets each (d) in counter-displays of 12 catch-covers each packed in shipper's containers — the product completely packed ready for national distribution.

How We Did It—Actually, as a matter of routine, for we are the world's largest unit-packagers of pills, tablets, capsules, triturates, creams and powders — with a single plant capacity of 10 million units in one shift — and production which can be rapidly expanded to 30 million units per day without additional equipment.

To You—This means that we make available to customers, both large and small, facilities which get their product into national distribution in the shortest possible time — a vital factor in these days of intense competition. It means that our customers have at their service, the finest packaging plant in the world — without investing a dollar of their own in plant or equipment.

Sanitape-Sealtite is a unique method of packaging pills, tablets, capsules, creams and powders, by which each unit or unit dose is sealed in its own airtight compartment surrounded by a crimp flange assuring complete protection and maintained efficacy. Packages, machines and methods covered by U. S. and foreign patents and patents pending. Available only through the Ivers-Lee Packaging Service. Infringing imitators will be subject to legal prosecution.



IVERS-LEE COMPANY, NEWARK, N. J.

New 30" ANTI-FRICTION CELLOPRINTER

**Increases Production
at least 20%**

**Semi-automatic web-splicing units plus
speeds up to 500 ft per minute make
this Kidder Press outstanding**

Combining the best features of time-tested Kidder Aniliner and Celloprinter presses with revolutionary new features, this entirely new machine promises you record-breaking production in high-quality, four-color Cellophane printing up to 32" web and printing width up to 30".

NEW WEB-SPLICING DEVICE

Operating at speeds up to 500 feet a minute, this Kidder Anti-Friction Celloprinter allows you to make all-day runs at normal press speeds without stopping for roll changes. That's because of *new semi-automatic web-splicing units at both unwind and rewind ends*. Any skilled press operator can learn to handle this web-splicing device in only a few hours. Think what this feature alone will mean to your production. A 10% increase is a conservative estimate. (These new web-splicing units are also available for Kidder 24" Celloprinter presses.)

OTHER PRODUCTION-BOOSTING FEATURES

- **A One-Man Press** — a single hydraulic control valve allows operator to release all the plates from the web.
- **Easy to register** — handwheel adjustment of lateral and longitudinal register is 3/16" in either direction . . . operable while press is in motion.
- **Special drying system** — not only dries the completely printed web, but also provides for partial drying in-between colors.

WRITE FOR SPECIFICATIONS AND COSTS

This new Kidder 30" Anti-Friction Celloprinter Press is so outstanding that you'll want to read all about it. Write today.

KIDDER PRESS COMPANY, INC.

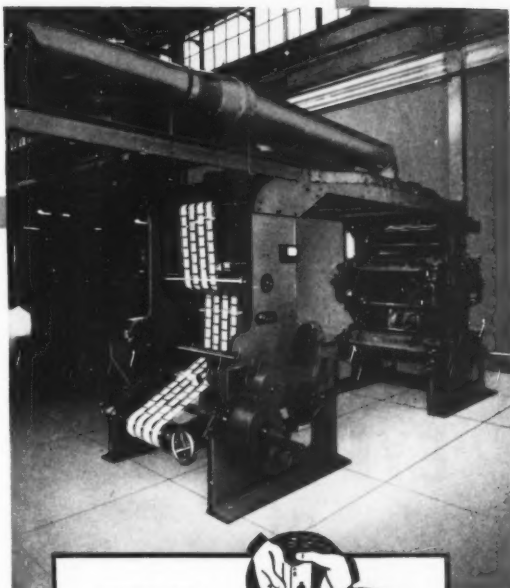
DOVER, NEW HAMPSHIRE

A. E. MARCONETTI, INC.

Empire State Bldg., New York 1, New York

MACHINERY SERVICE COMPANY

P. O. Box 33, Los Angeles 11, California



CONTROL OVER
THE PAPER
PROPER
DISTRIBUTION OF
INK
ACCURACY OF THE
IMPRESSION



KIDDER

Manufacturer of "3
Point" Presses — so-
called because they
fulfill the three ma-
jor requirements
for perfect printing.



NEW "EYE-FULLS" of SALES APPEAL

YOU are looking at the first new departure in the canning of syrup for many years . . . a completely redesigned line of lithographed metal cans by Heekin. The lithographed metal picnic basket is just another proof of the versatility of Heekin's color lithography and package design. If you are looking ahead perhaps some one from Heekin can look ahead with you. Ask us . . . There's no obligation.



Heekin

BEAUTIFULLY LITHOGRAPHED
CANS

THE HEEKIN CAN COMPANY, CINCINNATI 2, OHIO

120 Packages per minute..with ONE OPERATOR

Or, 7200 accurately filled packages per hour—
every hour!

The S & S HG-86-87 Automatic Tandem Filler (four stations), illustrated below, permits many combinations as to method of fill and feeding of packages. There may be complete fill at each station, or bulk fill at the first station, then dribble-fill at the second where the package is gross weighed.

For powdered or non free flowing products, the Tandem Filler can be used in conjunction with the S & S NEVERSTOP . . . which automatically feeds the cartons, bottom seals them, delivers them to the multiple filling units and, after they are filled, top seals the cartons . . . If you're interested in greater production and efficiency, write for complete details.



STOKES & SMITH CO.
PACKAGING MACHINERY PAPER BOX MACHINERY



Subsidiary of Food Machinery and Chemical Corporation
Frankford
Philadelphia (24), U.S.A.

Exclusive West Coast Distributor:
Anderson-Barngrover Division of FMC
San Jose 5, California

STOKES & SMITH CO.
Summerdale Avenue, Philadelphia (24), U.S.A.

Please send a copy of your folder on Modern Filling Machines.

Name

Company

Address

Elsie

PUTS A BIG CHEESE IN ITS PLACE*



* inside

A TRI-STATE RIGID PLASTIC BOX

For Top Appeal—Utility

—Premium Sales



"No favorite like an old favorite," says Elsie, the famous Borden cow. And packaging the perennially-popular two-pound Chateau Cheese Food in a new Tri-State Rigid Plastic Box makes this old favorite move like a brand new "Find" in spot markets throughout the country.

Co-starring with Borden's mellow-mild Chateau in the current promotion, this Tri-State Rigid Plastic Box proves that products in useful bonus boxes move faster — even at premium prices! Packaging your product in a

Tri-State Box, retailed at premium price, can boost unit sales in market after market.

Whether you manufacture a food, a confection, mass or class products of any kind—a gleaming, transparent Rigid Plastic individual showcase will keep your product fresher, cleaner, more appealing. We'll mold to your specifications, or you may choose an inexpensive Rigid Plastic Box from our wide assortment of stock shapes and sizes.

The best Rigid Plastic Boxes are Injection Molded by Tri-State.

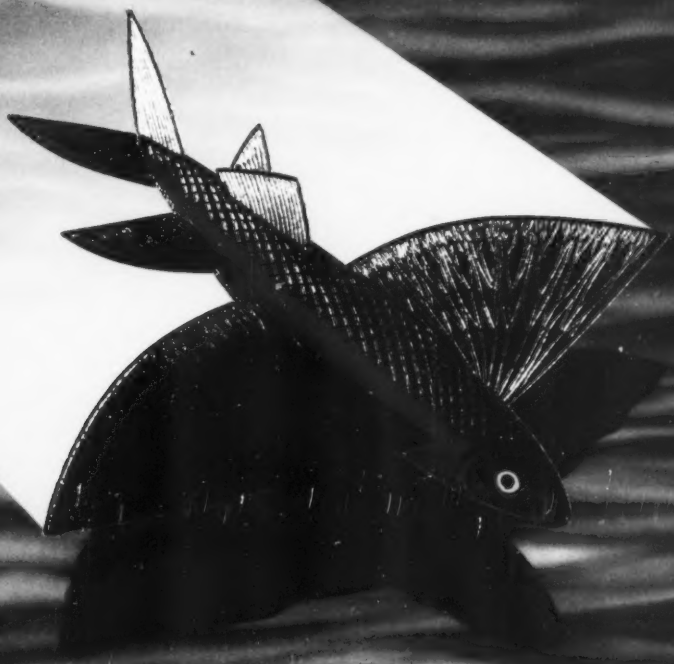


TRI-STATE PLASTIC MOLDING COMPANY

HENDERSON, KENTUCKY

New York Office: 12 E. 41st Street—Murray Hill 3-6572

Chicago: 176 W. Adams Street



EYE STOPPER

That's the effect a Dennison designed seal gives your package. It has that something extra—the result of constructive imagination, designing talent, manufacturing teamwork. Dennison experience and versatility offer you the finest in packaging accessories — tags, seals, wraps, bands, labels, merchandise cards, set-up boxes. For samples and suggestions appropriate to your product, call nearest Dennison sales office or write Dennison Manufacturing Co., Framingham, Mass.

Dennison

PAPER PRODUCTS FOR MORE THAN A CENTURY

Dennison Designed



Milord Combination Gift Kit is a man's gift for every occasion. The handsome package makes it appropriate for year 'round merchandising . . . birthdays, Father's Day, back-to-school, graduation, Christmas, anniversaries, and everyday thoughtfulness.

Dennison designed set-up boxes reflect creative skill and technical proficiency built up

by one hundred and six years of leadership in the field of packaging.

Dennison offers you a single cost transaction including expert designing, finished samples and reliable production. You know your entire package cost all at one time.

Call your nearest Dennison office or write the Dennison Box Division, Marlboro, Mass.

LOOK TO **Dennison** FOR PACKAGING THAT
REFLECTS THE PERSONALITY OF YOUR PRODUCT

Now...NEW PROCESSES PERMIT US TO SAY:

"NO ALL-TRANSPARENT BOX CAN MEET OUR PRICE!"

Now—you can package your product in gleaming, clear-plastic PLASTAFOL* cartons . . . (cartons that *fold* for economical storage and shipment . . . strong cartons that set-up fast and out-last others) . . . AT PRICES NEVER BEFORE EQUALLED.

Thanks to new processes—new materials—PLASTAFOL CAR-

TONS . . . (the *only* folding, all-transparent cartons on the market) . . . are now available at new, low prices—15, 20 and 25 percent lower than we ever were able to offer before.

If you've always regarded clear plastic packaging as too costly . . . or, if you want to cut down on your clear-plastic packaging costs, write, phone or wire us today!

Plastafol Carton Case Histories:

Foremost cosmetic house now packages eyebrow pencil and refills in Plastafol carton 7½ inches long.

Well known Pharmaceutical House dresses up doctors' samples in neat Plastafol carton ¼ x 1½ x 3½ inches.

Men's garters "sold on sight" by leading men's accessories manufacturer using Plastafol carton, 3¾ x ½ x 3 ⅝ inches.

* Trademark.

TROTH • BRIGHT • PAGE

INCORPORATED

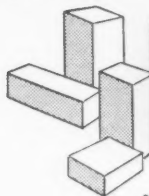
PAOLI, PENNSYLVANIA

Phone: PAOLI 1846

**Visible Quality in the Package Can Reflect the
Invisible Quality of the Product!**



**Leading Manufacturers of Ethical Drugs, Recognizing
That Fact, Give Preference to**



Ridgelo
CLAY COATED
REG. U.S. PAT. OFF.
BOXBOARDS

FOR FINE FOLDING CARTONS

CUSTOM MADE FOR EVERY ORDER
SUPERIOR PRINTING SURFACE
BRIGHTER - SMOOTHER
HIGHER VARNISH GLOSS
ASSURED UNIFORMITY
CONTROLLED COLOR MATCHING
BRIGHT FAST AND SOIL RESISTANT COLOR
LUSTROUS BRUSH FINISHES AND EMBOSSINGS

MADE AT RIDGEFIELD, N. J. BY LOWE PAPER COMPANY

Representatives

H. B. Royce, Detroit
Philip Rudolph & Sons, Inc., Philadelphia
A. E. Kellog, St. Louis
Norman A. Buist, Los Angeles



**H-A CAPS
SEAL
AND
SELL**

**H-A CAPS
on H-A Containers
Can Do a
SELLING
JOB**

**Top
your product
with a
SALES
MESSAGE**

**Capitalize With H-A Caps
Put Your Message on Them**

**HAZEL-ATLAS GLASS
COMPANY**
Wheeling, West Virginia





*Within easy
REACH!*

**Not One, Not Two, But FIVE
Conveniently located Betner Plants**

make our food packaging service flexible and economical

DEVON, PA.
RICHMOND, VA.
APPLETON, WIS.
PARIS, TEXAS
LOS ANGELES, CAL.

Pinpointed for service to food processors everywhere . . . that's the big idea behind the locating of these Betner Better Bag plants. Where do you have your business? What kind of bag do you need for your product? Betner has it . . . and can get it to you quickly.

Backing up our idea of what a complete bag service should be is a widely-flung sales organization, one or more members of which are near you. Betner Bags are, in effect, as close to you as your classified directory.

Your product will GO safely in one of these types of bag

- Foil
- Wax-glassine
- Duplex-wax-glassine
- Laminated wax-glassine
- Cellophane

Betner bags are "proofed" against . . .

- moisture-vapor
- grease
- water
- insects
- sifting

Many Betner bags are THERMOSEAL*-ed

This is our patented, heat-sealed closure which gives up to 20% greater protection.

*Trade Mark Reg. U. S. Pat. Off.

Benj C Betner Co DEVON, PA.

CAMP BETNER CORP., Richmond, Va.; BENJ. C. BETNER CO. of WISCONSIN, Appleton, Wisconsin; BENJ. C. BETNER CO., Paris, Texas; BENJ. C. BETNER CO. of CALIFORNIA, Los Angeles, California; SOUTHERN PACKAGING CORPORATION, High Point, N. C.; Affiliate of Benj. C. Betner Co.

A complete bag service—from idea to finished bag to machinery for closing coffee bags and filling and closing liner bags for cartons.

COUNTER-attraction!



PACKAGES CUSTOM-BUILT FOR YOU resist indifference!

It saves TIME . . . cuts COSTS . . . prevents SPOILAGE
. . . protects FLAVOR . . . has EYE-APPEAL . . . creates
SALES APPEAL . . . outbids COMPETITORS . . . fosters
RECOGNITION.

Yes! Pyro will design and mold a Box, a Vial, a Bottle,
a Cap, a Cover—to suit and dramatize your goods. If
counter (or shelf!) attraction is important to you . . .
get Pyro, get Action, get our packaging technicians to
take it from there!

Pyro

PLASTICS CORPORATION

UNION, NEW JERSEY

What

ALUMINIZING

does for your Product



When the Guards change from battle dress to full ceremonial—what a transformation! And what a transformation when a packaged product is ALUMINIZED! It takes on an entirely new character and appeal. It glitters with metallic brilliance and colour, attracting the eye, enhancing the product and quickening the desire to possess. And not only that, 'ALUMINIZING'—the studied craft of Fisher's—means protection of contents

under all climatic changes and conditions because Fisher's Foils are impervious to damp, heat, light rays and contamination. They can be laminated to wax or tissue paper for double protection, or backed with paper or board for carton production. And your own standard trade mark design can be incorporated. Let 'ALUMINIZING' enhance the sales appeal of your productions as thousands of the world's leading retail distributors are now doing.

Let FISHER'S
THE ALUMINIUM FOIL EXPERTS

Aluminize your Product!

FISHER'S FOILS LTD., EXHIBITION GROUNDS, WEMBLEY, MIDDX., ENGLAND.



Sun Tube
announces
a major advance
in
modern packaging...

AEROSOLS in 1oz. to 4oz. sizes!

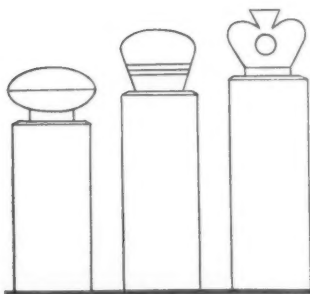
These highly attractive small aerosols, new evidence of Sun Tube leadership, open up exciting merchandising and product opportunities—especially for packers of cosmetics and pharmaceuticals.

Complete and ready to fill, they are available in aluminum in 1 oz., 2 oz., 3 oz., and 4 oz. sizes.

Your inquiry is invited, direct to—

Sun Tube Corporation

181 Long Avenue, Hillside, New Jersey





POLYTHENE-LINED PAPER BAG PROTECTS MOISTURE-SENSITIVE GLUE

Multiwall bag with a polythene-coated ply has improved resistance to atmospheric moisture over a wide range of temperatures...plus many other advantages

WHEN The Borden Company needed an economical, damp-proof package for a very hygroscopic powdered resin glue, they chose a sturdy, lightweight, inexpensive multiwall paper bag, one layer of which has a thin coating of Du Pont polythene plastic. These bags keep moisture out during handling and shipping, protect contents until used. Compared with many other types of containers, the empty bags save up to 91% of storage space—save shipping costs, too.

The use of paper coated with Du Pont polythene in multiwall bags provides these advantages:

- better protection against moisture
- better chemical resistance
- better strength
- better grease resistance

These characteristics are retained over a wide range of temperatures. The use

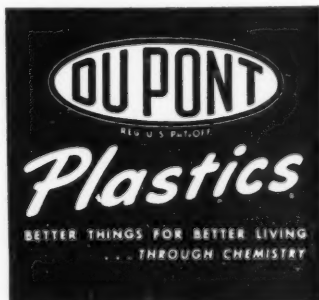
of a polythene-coated ply also offers greater versatility, since film thickness can be varied to meet specific requirements.

Many other "hard-to-pack" products are being successfully shipped in these bags, including calcium chloride, dry milk, meat trimmings, sodium bisulfite, benzene hexachloride, quicklime, various synthetic resins.

The multiwall bag is only one of many new packaging applications of polythene. The new coating technique used here is a joint development of St. Regis and Du Pont technical men. Du Pont representatives will gladly work with extruders, molders, or converters, or will suggest suppliers who can meet specific needs for packaging or other uses of plastics. Write today for free literature on polythene and other versatile Du Pont plastics.

(Multiwall bag made by St. Regis Paper Co., New York, New York.)

E. I. du Pont de Nemours & Co. (Inc.), Polychemicals Department, Plastics Sales Offices: 350 Fifth Ave., New York 1, New York; 7 S. Dearborn St., Chicago 3, Illinois; 845 E. 60th St., Los Angeles 1, California.



Free—Package Printers' Color Guide for Boxboard



Here is a handy item free to package printers and designers. It's the new IPI Color or Guide for Boxboard—40 colors (varnished and unvarnished) on both clay coated (Amer. Coating Mills) and patent coated board. All these colors picked by experts as best suited to general package printing. For your free copy ask your IPI salesman or write us at IPI Headquarters, 650 11th Avenue, New York 19, N. Y.

IPI and Anilox are trade-marks of Interchemical Corporation



Let There Be Light—the Right Kind of Light



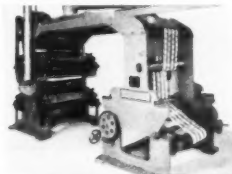
Do colors match in your pressroom but jump wide apart in the office? If so, you have light trouble. Colors matched under incandescent light won't look the same in fluorescent light and vice versa. The secret lies in a standard source of light approximating daylight in both places. Or if your colors are matched by Recording Spectrophotometer they will look the same under all lights, regardless of type.

IPI • DIVISION OF INTERCHEMICAL CORPORATION • 650 ELEVENTH AVE., NEW YORK 19 • ADDRESS INQUIRIES DEPT. A

NEW ANILINE PRESSES FEATURE ANILOX SYSTEM OF INK DISTRIBUTION

Nearly all new Aniline-type presses feature the IPI Anilox System of Ink Distribution—as either standard or optional equipment. The new Kidder 4-color "Celloprinter" shown below is a typical example. It is one of the fastest, most advanced aniline presses of its type. Although designed primarily for cellophane, it can also handle all grades of paper and lightweight board stocks. Speed is up to 500 fpm.

The Anilox System of Ink Distribution is an IPI development. It gives positive control of ink film thickness independent of press speed or other factors (within practical limits). The Anilox roller picks up a measured, constant amount of



ink and transfers it to the plate for precise printing control. Be sure that your next Aniline-type press has the IPI Anilox System of Ink Distribution.

SWIFT GRAND PRIZE WINNING PACKAGES LITHOGRAPHED WITH IPI OFFSET COLORS



Lots of prize winning packages are printed with IPI inks every year. But we are extra proud of the Swift's Premium line of Quick Frozen Food packages. They won the Grand Prize in last year's Box Competition of the Folding Paper Box Association of America. Top-notch design, quality stock and superb lithography (with IPI "Press-tested" offset inks) turned the trick.

These beauties are the work of Jim Zdenek, Swift's Director of Package Design. Ten pack-

ages are in the full line—every one a prize winner. American Coating Mills Division of Owens-Illinois Glass Company lithographed them on special white clay coated stock—in six colors at 3500 sheets per hour—stream fed.

These packages have the "self-selling" touch. They are fresh, crisp and eye-catching. The familiar "Swift's Premium" symbol stamps each item as of highest quality. And so does the fine craftsmanship of every package in this new food line.

HOT DOG RED, MUSTARD YELLOW—NO PROBLEM FOR IPI COLOR MATCHERS

Recently an IPI customer ordered five pounds of *Hot Dog Red*. He got his ink in jig time—then complained that our *Hot Dog Red* didn't match the real thing. IPI's color matcher asked "Did you cook 'em? Frankfurters can't be hot dogs 'til they're boiled or grilled." Sure enough, our *Hot Dog Red* matched the cooked franks to a T.



Minutes later the customer called back for 2 pounds of *Mustard Yellow*. And he added, "I don't care whether it's boiled, fried or stewed mustard."

Moral: Always order color by IPI Color Guide number or A.S.A. specification and avoid confusion at press time.

FERD'NAND

Posthaste

By Mik



"Point of Purchase" selling power of printing ink features this NAPIM advertisement—latest in series boasting use of color printing.



was this call necessary?

Some "Moral Insurance" here might have avoided a serious accident

Workmen's compensation is a fine thing—but it can't replace a mangled arm.

Safety laws prevent many accidents—but they can't cover every hazard of an individual plant.

Accident prevention which goes *beyond the law* is an unwritten responsibility of every employer. It is his "Moral Insurance" for his employees welfare.

The premiums for "Moral Insurance" are not high. They do not have to be paid for in fancy safety gadgets. Their cost is simply the institution of common sense safety regulations covering all local hazards—enforced by employee committees with the full support of management.

Yes—"plant safety" is a mutual job.

DON'T FORGET—THE LIFE YOU SAVE MAY BE YOUR OWN



Published in the public interest by:

MODERN PACKAGING

It's Wright with CHASE!

Wright's Hy-Tra-Lec Cuts Weighing-Packaging Costs



St. Louis plant of Chase Candy Company weighs-fills more accurately at high speeds with Wright Hy-Tra-Lec Automatic Weigher. Gum slices were being run when this photo was taken. The Chase model has two weighing heads with single spout, hopper incline conveyor, and take-away conveyor to sealing station. Other users in the candy field include Charms, New England Confectionery Company, Websters', Kroger and Frantz Marshmallows.

(For Technical Readers: Hy-Tra-Lec has neither beam nor spring scales. Utilized for the first time in automatic machinery are the principles of "positive displacement," resulting in a weighing accuracy at high speeds which exceeds previously accepted standards. You would observe with interest the simplicity of the weighing unit itself and the integration of the vibrator feed. Indications point to this new weighing system being regarded as having opened an entirely new vista in weighing engineering.)

Candy is the latest field entered by Wright with its new weighing system. Indications point to wide acceptance. Customers to date include such manufacturers as Chase, Websters', New England Confectionery Company, Charms, Kroger and Frantz Marshmallow.

Wright's Hy-Tra-Lec makes money for you by gently net weighing and filling more accurately at high speeds. Semi-automatic when bags are used. Fully automatic for rigid containers. Available with single or multiple weighing head units. Range: One-half ounce to 16 ounces.

Products now being handled include hard candies, wrapped candies, gum slices, mints, marshmallows and candy corn.

If lower production costs and more uniform packaging are among your 1950 objectives, it will pay you to investigate now.

WRIGHT MACHINERY COMPANY

ESTABLISHED 1893 · DURHAM, NORTH CAROLINA
SUBSIDIARY OF THE SPERRY CORPORATION



COMPANY SALES OFFICES: JERSEY CITY · CHICAGO · DURHAM
WEST COAST REP.: KING & ANDERSON, SAN FRANCISCO
SOUTHWEST REP.: R. P. ANDERSON COMPANY, DALLAS
CENTRAL REP.: HAL HUDSON EQUIPMENT COMPANY, TOLEDO
EUROPE: SPERRY GYROSCOPE COMPANY, LTD., LONDON

Wright Machinery Company
500 Calvin Street, Durham, N. C.

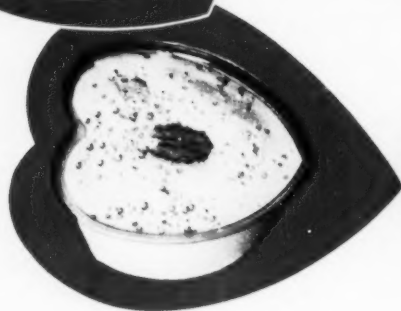
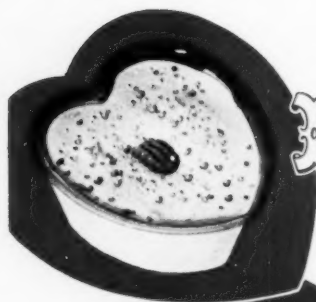
Gentlemen: Please send me latest information on your Hy-Tra-Lec Automatic Weighers.

Name

Company

Address

City State



Ice Cream Sweet Hearts

packaged at low cost



...in disposable cups of Koppers Polystyrene

HERE'S a new and different package so low in cost that the seller can almost forget packaging expense. The hearts, made of Koppers Polystyrene, can be turned out quickly by the thousands. They add little to the cost but pack a lot of sales appeal.

Koppers Polystyrene was chosen because it yields a faster molding cycle, has better mold release and produces more pieces per pound than other plastic materials.

Polystyrene is tasteless, odorless and sanitary. It can be used for food products, drugs, cosmetics, jewelry and hundreds of other items.

How Koppers can help you

Koppers maintains a staff of specialists who can help you in developing the best type of package for your merchandising program. Bring your problems in plastics to Koppers. There's no obligation.

KOPPERS COMPANY, INC.

Chemical Division

Pittsburgh 19, Pa.

Regional offices: New York, Boston, Philadelphia, Chicago, Detroit and Los Angeles

ICE CREAM SWEET HEARTS—individual plastic hearts filled with cherry ice cream and topped with a pecan. This idea was developed by the Quality Check Ice Cream Association. The low cost of Koppers Polystyrene made the idea practical. Molder: Michigan Molded Plastic Company.



Koppers *Perfected* Plastics

THEY GOT THE FACTS FROM FORBES



SELLING THE FIZZ! The radio millions who have heard Alka-Seltzer's fizz trade-mark almost hear it again when they see this realistic, impact-packed 8-color display in their drugstore windows. Created and produced by Forbes, this versatile display has made a hit with druggists because the component pieces can be used separately or in groups on counters and display case ledges after they've done their selling act in windows. Alka-Seltzer's advertising agency is Wade Advertising Agency.



ENCYCLOPEDIA is the word for the 1949 edition of the Ball Blue Book, the bible of the home canning and home freezing field. Legibility of type pages, outstanding color photography and clean-cut reproduction characterize the part Forbes played in launching this best seller. Ball Bros. Company's advertising agency is Applegate Advertising Agency.



COLOR CODING of flavors adds extra pick-up appeal to the "Junket" packages. Created and produced by Forbes, these packages stand out on grocers' shelves everywhere. "Junket's" advertising agency is McCann-Erickson Inc.

FORBES FACTS help you take the guesswork out of the matter and form of your printed merchandising. This amazing library of facts grew out of Forbes' experience, continuing studies and *unique* facilities in lithography, letterpress, web gravure and die stamping under one-roof management control. Ask the Man from Forbes to tell you more.



Avoid that mistake. Be sure to warn
your dealers to get ready for
store traffic when your displays are
impact-packed by the Facts from Forbes.
Results are immediate, our clients say.

FORBES LITHOGRAPH CO.

NEW YORK • CLEVELAND • BOSTON • CHICAGO • ROCHESTER

Delivers Merchandising Impact



An Honored Name in Package-Craft

**Enters a New Field, with the Most Modern Equipment
known to the Packaging Industry**

FOLDING

"In Announcing this new Department, we promise you the time-tested experience of 84 years in packaging, which has earned us the reputation, 'Rely on Ritchie for Packaging Perfection' . . . Plus the latest, most modern and efficient equipment obtainable to produce a different kind of folding carton service that will be in keeping with the service we have been rendering on Set-Up Boxes, Transparent Packages and Fibre Cans for such famous firms as those listed on the following page."



New Brochure!

"101 WAYS TO GET BETTER PACKAGING"

This new booklet contains the Essence of 84 Years' Experience Solving Package Problems; Brings You the Answers on How to Protect and Dress Up Your Product; Cut Costs; Increase Sales; Improve Profits, based on the solutions found by the country's leading package users. Get your copy of this helpful little book simply by checking the space on the coupon marked FREE BROCHURE.

**SEND IN
THIS COUPON
TODAY** (Check the
service in which
you are interested)

J. H. Cronos
J. H. Cronos, President

W. C.
Ritchie
and Co.,
8840 Baltimore
Avenue,
Chicago 17,
Illinois

FREE APPRAISAL

Without cost or obligation, please have a Ritchie representative call on me with full details of your Free Carton Appraisal Offer. ☐

☐ **FREE BROCHURE** I would like to receive a copy of your brochure, "101 Ways to Get Better Packaging" and am interested in getting quotations on ☐ Set-Up Boxes ☐ Fibre Cans ☐ Transparent Boxes ☐ Folding Boxes. Please have a Ritchie Representative call on me.

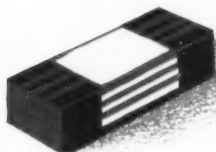
Signed _____ Title _____

Company Name _____

Street Address _____

City _____ State _____

by **Ritchie**
Sunbeam Corporation



Folding Carton Service
FREE APPRAISAL OFFER

to our customers and prospective customers—
purveyors of retail merchandise—who desire to obtain
an impartial, authoritative opinion of their packaging,
we have retained a **Nationally Known Package Designer**
to evaluate your cartons in terms of Eye Appeal; Product Requirements; Material
Suitability; Convenience Factors; Economy and Merchandising Consideration, etc.
Use the adjoining coupon now, to get complete details of this valuable
package-appraisal service without cost or obligation.



NOW IN FOLDING CARTONS, TOO: LOOK TO

W. C. *Ritchie*
AND COMPANY

8840 Baltimore Ave., Chicago, Ill.

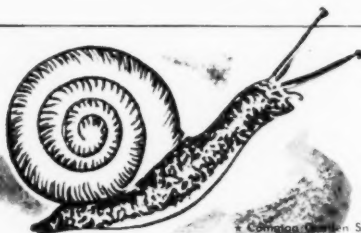
BD-4094 NEW YORK • LOS ANGELES • DETROIT • PROVIDENCE • DENVER • ST. LOUIS • CLEVELAND • JACKSONVILLE • DALLAS

FEBRUARY 1950

**PROTECTION
AND**

Beauty

**FOR YOUR PACKAGED
PRODUCTS**



* Common Garden Snail



** Wood Duck (Male)



PAPERS

For The FOOD INDUSTRY

ALL food products need **PROTECTION** from processing room to consumer's table.

There is a KVP wrapper or liner for nearly every packaged food product.

MANY food products need the **BEAUTY** of color and design for brand identity and sales appeal.

KVP artists and KVP printers are tops in their field.

For straight protection, or for protection AND beauty, you can depend on KVP.

*The common garden snail, *Stylommatophora*, is no beauty, but his shell is tops in protection for his tender body.

**Most beautiful of all ducks is the wood duck, *Aix sponsa*, which builds its nest in hollow trees, often far from water.

INDUSTRIES SERVED

BAKING	MEAT
Bread - Cracker	Packing - Locker
Cereal	Retail
DAIRY	
Butter - Cream - Cheese	
Ice Cream - Milk	
FISH - FRUIT - FROZEN FOODS	
POULTRY - SHORTENING	
VEGETABLE	

Kalamazoo Vegetable Parchment Company

PARCHMENT • MICHIGAN

ASSOCIATED COMPANIES: KALAMAZOO VEGETABLE PARCHMENT CO., DEVON, PENNA.
KVP COMPANY OF TEXAS, HOUSTON, TEXAS
HARVEY PAPER PRODUCTS CO., STURGIS, MICHIGAN
IN CANADA: THE KVP COMPANY LIMITED, ESPANOLA, ONTARIO
APPLEFORD PAPER PRODUCTS LIMITED, HAMILTON, ONTARIO - MONTREAL, QUEBEC



This 3-point package is geared for self-service

It scores on every point—this Oscar Mayer's sliced-bacon package.

1. The crystal-clear transparency of Du Pont Cellophane helps make a product its own best salesman. It gets the shopper's attention . . . tells her all she wants to know.

2. The scientifically tailored protection of Du Pont Cellophane keeps foods fresh, flavorful and sanitary.

There are over 50 film types—each designed for a specific protective job.

3. Du Pont Cellophane is a *truly economical* packaging material for it does both an effective merchandising and protective job. And it operates on high-speed packaging machinery.

E. I. du Pont de Nemours & Co. (Inc.), Cellophane Div., Wilmington 98, Delaware.

Du Pont Cellophane

Shows what it Protects
Protects what it Shows



Better Things for Better Living . . . through Chemistry

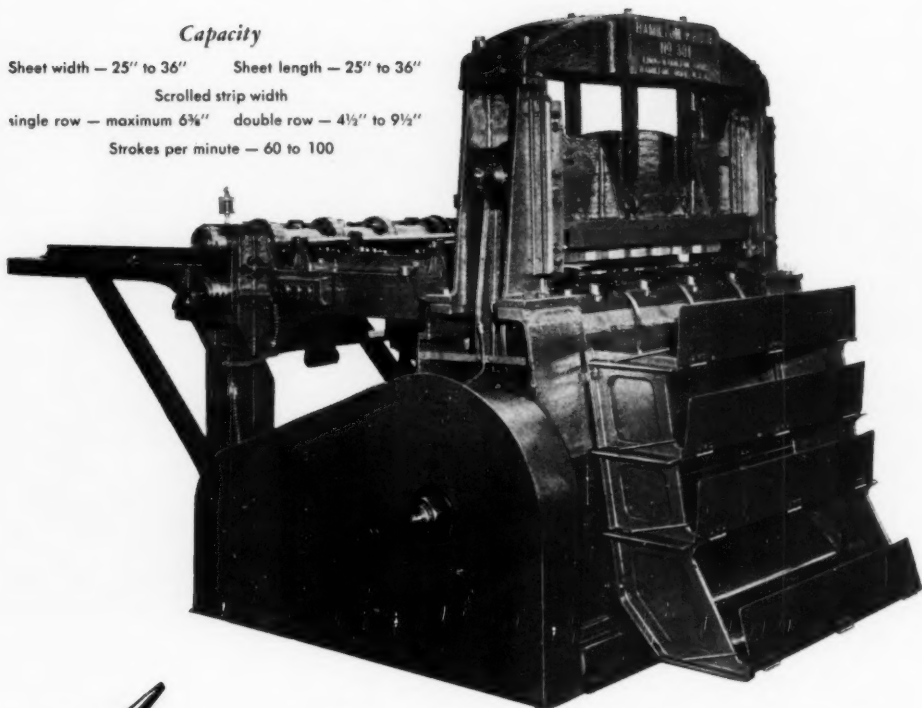
Capacity

Sheet width — 25" to 36" Sheet length — 25" to 36"

Scrolled strip width

single row — maximum 6¾" double row — 4½" to 9½"

Strokes per minute — 60 to 100



Announcing the new Hamilton-Kruse SCROLL SHEAR



Here is the latest addition to the line of Hamilton-Kruse can-making equipment — the model 301 Scroll Shear. It has been designed to save from 4% to 7% in the tinplate required for can ends, bottle caps, screw caps, and other closures, as compared with straight-cut strips.

Operating at high speed, machine has a long die slide and rigid frame, which together give true die alignment and resulting maximum die life. The operating mechanism is located below the table thereby preventing oil or grease from contaminating the table. The scroll shear can be equipped for either hand or automatic sheet feeding.

Extremely accurate spacing is one of the outstanding features of this Hamilton-Kruse model.

Automatic fingers carry the sheets to the die for cutting. As the sheets are fed into the die, they are pushed back against positive stops at each stroke so that each cut is exactly positioned. After cutting, the front and back strips and the scrap drop automatically into their respective bins.

Other features include the intake table which has a squaring or gaging device and a slitter attachment that trims two sides of the sheet — and the safety devices which include a ball-loaded slip clutch and a magnetic brake on the 3-hp individual-drive motor.

* * *

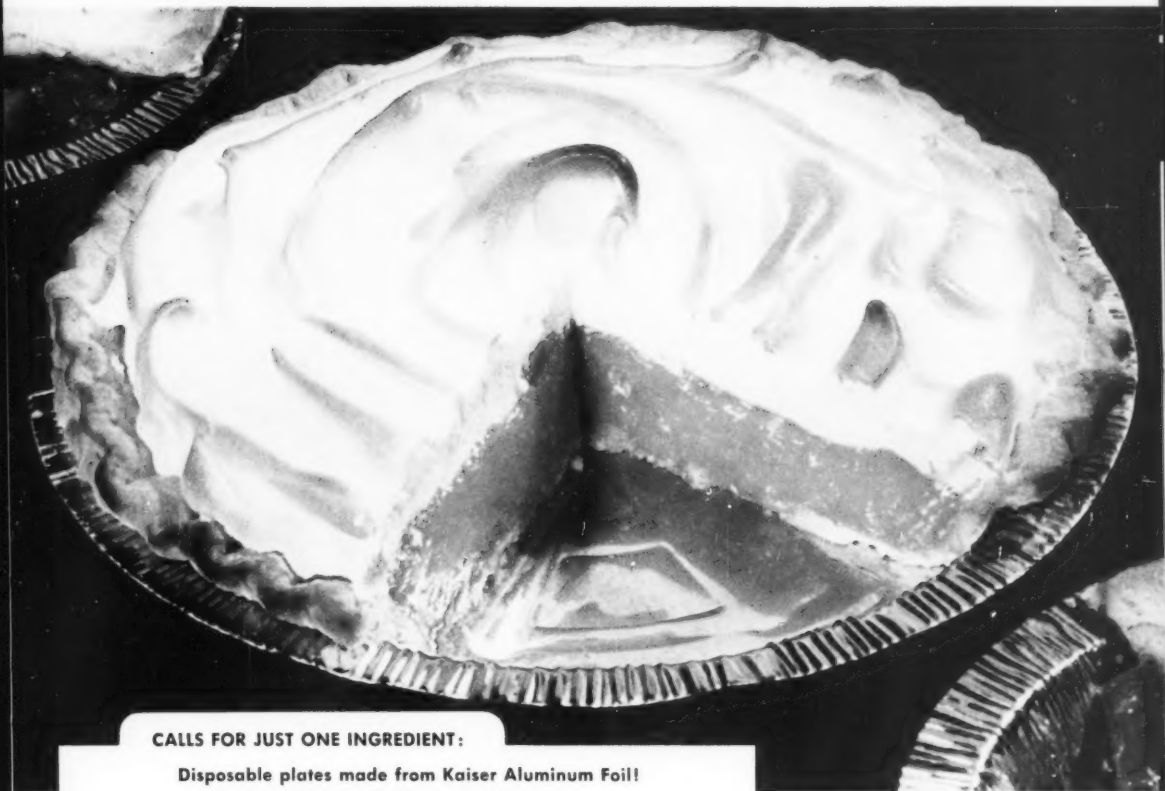
For complete information and specifications write to Can Machine Department, Lima-Hamilton Corporation, 60 East 42nd Street, New York 17, New York or to the Chicago Sales Office at 400 West Madison Street, Daily News Building, Chicago 6, Illinois.

DIVISIONS: Hamilton, Ohio — Hooven, Owens, Rentschler Co.; Niles Tool Works Co., Lima, Ohio — Lima Shovel and Crane Division; Lima Locomotive Works, Inc. Middletown, Ohio — United Welding Co.



PRINCIPAL PRODUCTS: Hamilton-Kruse automatic can-making machinery, Hamilton heavy metal stamping presses, Hamilton diesel and steam engines, Niles heavy machine tools, Locomotives, Shovels and cranes, Special heavy machinery, Heavy iron castings, Weldments.

Recipe that puts more profit in pie!



CALLS FOR JUST ONE INGREDIENT:

Disposable plates made from Kaiser Aluminum Foil!
Gives bakers all these advantages...

Greater conductivity—which means even and rapid heat distribution—better pies!

Efficiency and economy—No washing, wiping or inspection necessary, as with heavy-duty steel plates which are constantly re-used. Lightness of Kaiser Aluminum Foil reduces warehouse space, cuts handling, lowers shipping costs.

Flavor protection—Foil imparts no taste. No grease absorption as with paper plates.

Extra sales appeal—Plates of Kaiser Aluminum Foil look *more attractive*... step up over-the-counter sales!



Pie plates in standard sizes are produced by *Foil Kraft*, Los Angeles, California... consistent user of Kaiser Aluminum Foil.

This product is another example of Kaiser Aluminum's policy to help establish new foil customers... through close technical cooperation, as well as

prompt deliveries of quality foil.

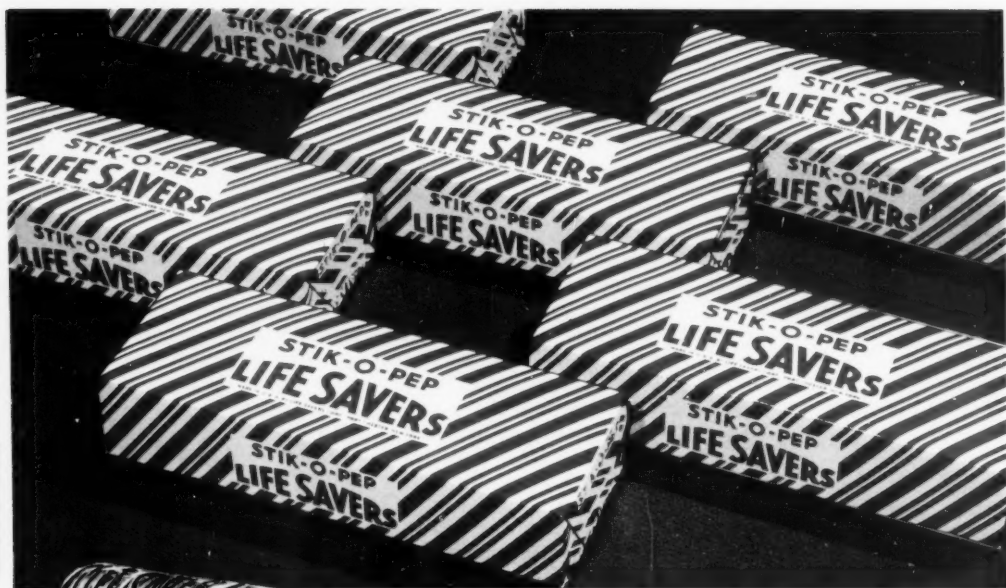
Kaiser Aluminum Foil is produced by Kaiser Aluminum & Chemical Corporation.

Kaiser Aluminum Foil

SOLD BY KAISER ALUMINUM & CHEMICAL SALES, INC., KAISER BUILDING, OAKLAND 12, CALIFORNIA... OFFICES IN:
Atlanta • Boston • Chicago • Cincinnati • Cleveland • Dallas • Denver • Detroit • Houston • Indianapolis • Kansas City • Los Angeles
Milwaukee • Minneapolis • New York • Oakland • Philadelphia • Portland, Ore. • Rochester, N. Y. • Seattle • Spokane • St. Louis • Wichita

NASHUA MAKES THIS NEW "LIFE SAVING" CARTON WRAP FOR FLAVOR PROTECTION OF "STIK O PEPS"

Life Savers Corporation Also Eliminates Double Wrapping and Speeds Production With Specially Coated Laminated Sheets

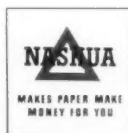


The makers of Life Savers expect STIK O PEPS to retain their delicious flavor and wholesome goodness long after this new product has left the factory. And why not? Their carton wrap, supplied by Nashua, is a laminated sheet—specially coated to provide a firm seal and is highly vapor and moisture proof. And in one "package", in addition to greater flavor protection,

this customer has eliminated double wrapping and obtained greater streamlining in production. Inside the carton, too, Nashua waxed inner wraps help keep the candy fresh. Nashua also supplies other carton wraps for this internationally known maker.

MORAL: Even if you market an *impulse item* — don't buy your packaging *on impulse* — look around for the best — at Nashua.

NASHUA GUMMED AND COATED PAPER COMPANY
NASHUA, NEW HAMPSHIRE



Modern packaging



SMALL SIZES of canned fruits and vegetables have been stocked in some 300 Bohack stores in Brooklyn and Long Island.

The trend to smaller and smaller packages began with the disappearance of the cracker barrel. Now, 50 years later, the small package, interrupted by the shortage of packaging materials during the war, is winning new prestige. Manufacturers in all lines of foods, particularly, have come to a realization that new markets can be reached with products done up in small units planned for the growing number of small families and for individual servings in restaurants, at drug-store counters and for such outlets as vending machines.

Just recently H. C. Bohack Co., Inc.,

has stocked 300 stores in Brooklyn and Long Island with 26 varieties of fruits, vegetables and juices in 7- and 9-oz. cans, some of them nationally advertised brands and several bearing the store's private brand, Bohack's Best.

Stokely-Van Camp, Inc., announces a whole line of processed fruits and vegetables in 8-oz. glass jars, promoted as "Gems in Glass," specially designed for small-family use and the live-aloners.

In line with the same trend is a much-needed revolutionary development in which Arnold Bakers, Inc., Port Chester, N. Y., has taken the lead

The smaller package

WHAT IS ITS PLACE IN TODAY'S ECONOMY?

ARE CONSUMER UNITS GETTING BIGGER OR

SMALLER? IS THERE A MARKET FOR SINGLE-

SERVING AND COOKING-FOR-TWO PACKAGES?

by putting out a new small-family loaf of white bread, containing 14 full-sized slices wrapped in cellophane—probably one of the first of its kind in the baking industry.

Economic factors

Many complex economic forces are contributing to the increased interest in small-sized packages. First, perhaps, is the growing number of small families. Department of Commerce figures indicate that there are approximately 40,000,000 families in the United States, half of them couples without children and about 20% of them with only one child. In the large urban centers there are thousands of men and women who live alone in small apartments. For this segment of the growing population, storage space in houses and small apartments is limited and wasted leftovers are a problem. Furthermore, each year more women go to work. It is estimated that 30% of all women over 14 years of age in the United States are now employed. These women, who do their housekeeping as a side line, must streamline operations and are a ready market for the small package of fruits or vegetables (canned or frozen) and ready-mixes, which can be used up at one meal.

Continued high prices are also a



TWO TO THREE SERVINGS are offered in Stokely's new line of 8-oz. jars. No. 2 and No. 2½ cans in photograph illustrate comparative size.

contributing force toward greater use of the smaller package. Smaller sales units permit food producers to meet competition by offering packages tailored to the requirements of small families.

Said one large producer of frozen foods, whose packages contain less quantity than during the '30s, "When high costs of food made it necessary to raise prices, our market studies indicated that consumers preferred smaller packages with less quantity than to pay the increased price for the larger quantity sold during the '30s."

Changing shopping habits are a strong influence affecting the size of the package. This is true in rural areas, as well as in the fast growing urban centers. With good roads in all parts of the country and an automobile on almost every farm, shopping has become almost as frequent an affair for the rural resident as it is for the city dweller. The farmer's wife no longer has to stock up for days or weeks ahead when she comes to town. She simply hops in the family car and does her shopping when and as needed.

A particularly good example of this situation is the experience of Red Owl Stores, Inc., Minneapolis. The Red Owl business started 27 years ago and

all during those years, the majority of the company's stores have been located in the smaller towns of the nine upper Midwest States. Even today, very few Red Owl stores are located in metropolitan areas and, therefore, a large portion of the customers are farm families.

In years gone by, according to Glenn R. Grife, executive vice president of Red Owl, these farm customers purchased the large portion of their foods in large-sized containers, whereas in recent years there has been a progressive trend toward smaller and smaller containers for food products.

There are many reasons for this, he says. Years ago a trip to town was a big event and farm families purchased large quantities of foods to hold them over until their next visit. It was the custom to purchase flour in 49-lb. and 98-lb. sacks, sugar in 100-lb. sacks, syrup in 10-lb. pails, canned fruit in gallon cans, rolled oats in 9-lb. bags, jelly in 5- and 10-lb. pails. This was true of Red Owl customers during the '20s and the depression '30s. Then came more and better cars and roads, movies, better stores and more reasons for coming to town more often—including greater farm prosperity. Modern farm machinery did not require all of the manpower or manual labor previously needed on farms. Improved packaging and refrigeration and a good many other reasons started the change in customer buying habits, the financial condition of farmers probably being most important.

"Since the middle '30s we have noticed a marked trend toward preference for smaller and smaller food containers by farm customers," says Mr. Grife. "Because of our rural stores, we probably sell more of the larger-sized food containers to our customers than the average chain food distributor, but this definitely is rapidly diminishing.

"Today our volume on No. 10 cans of fruit is very small and we enjoy a good volume on 8-oz. and 16-oz. cans, although we probably sell more No. 2½ containers than do our food friends who operate in metropolitan areas. Sure, we still sell large quantities of pepper in ½-lb. containers, rolled oats in 48-oz. packages, syrup in 5-lb. pails, but we no longer think of offering 25-lb. or even 10-lb. boxes of bulk prunes to our customers as

SMALL LOAF of white bread, cellophane wrapped, is Arnold's revolutionary development. The 10-oz., 14-slice package means new markets for bread with no loss in sales of larger loaves, according to company.



TABLE I—COMPARISON OF REPRESENTATIVE FRUIT AND VEGETABLE PACKS, INDICATING TRENDS IN CONTAINER SIZES USED BY THE CANNING INDUSTRY*

	Fruits		Vegetables	
	1940 Actual cases	1948 Actual cases	1940 Actual cases	1948 Actual cases
Apricots				
No. 2 1/2	1,047,585	2,585,989	No. 2	5,834,608
8Z (short & tall)	78,643	305,299	8Z	345,858
No. 1 (tall)	245,515	595,105	No. 1 (picnic)	187,280
No. 303	..	367,704	No. 2 1/2	317,071
No. 2	55,760	80,087	No. 10	1,267,169
No. 10	826,050	1,023,469	Miscellaneous	356,884
Miscellaneous	10,857	52,982	Total	7,963,012
Total	2,264,210	5,010,675		11,746,993
Sweet cherries				
No. 2 1/2	258,786	330,208	Sweet corn	
8Z (short & tall)	54,671	115,145	No. 2	10,274,791
No. 300	..	21,764	8Z (short & tall)	77,971
No. 1 (tall)	91,469	119,479	No. 1 (picnic)	515,160
No. 303	..	65,342	12Z (Vac)	2,773,237
No. 2	85,748	168,275	No. 303 & 300	1,580,647
No. 10	135,360	130,307	No. 10	924,963
Miscellaneous	4,099	1,427	Miscellaneous (tin & glass)	117,280
Total	630,133	951,947	Total	16,264,049
Peaches				
No. 2 1/2	7,842,160	12,558,065	Green peas	
8Z (short & tall)	255,946	599,843	No. 2	16,457,911
No. 1 (tall)	1,114,336	1,103,103	8Z (short & tall)	379,861
No. 303	..	989,508	No. 1 (picnic)	1,572,120
No. 2	249,707	263,373	No. 303	4,999,405
No. 10	1,909,917	2,009,519	No. 10	1,867,130
Miscellaneous	91,817	520,253	Miscellaneous	183,854
Total	11,463,883	18,043,666	Total	25,460,290
Grapefruit juice				
Indv. 5-6Z	..	744,710	Tomato juice	
No. 2	3,738,201	2,487,098	Indv. 5-6Z	..
8Z	25,860	25,533	8Z	353,595
No. 1 (picnic)	4,636	..	No. 1 (picnic)	504,553
No. 211 (cylinder)	139,088	23,136	No. 211 (cylinder)	741,284
No. 300	88,218	..	No. 300	1,185,611
No. 1 (tall)	No. 1 (tall)	871,568
No. 303	No. 303 (cylinder)	1,541,199
No. 303 (cylinder)	41,496	..	No. 2	835,488
No. 3 (cylinder)	4,316,820	11,073,053	No. 2 (cylinder)	1,230,099
No. 5	16,342	..	No. 3 (cylinder)	2,533,202
No. 10	172,087	514,908	No. 10	1,704,120
Miscellaneous	1,114,438	94	Miscellaneous	878,155
Total	9,657,160	14,868,532	Glass	535,312
			Total	12,414,186

* Statistics supplied by National Canners Assn., showing last normal prewar year contrasted with 1948, latest available figures, those eliminating the war years during which the M-81 tin conservation order restricted the use of small sizes.

† Including 16-oz. glass.

we frequently did, not too many years ago, when we sold thousands of full cases."

The individual serving

A comparatively new field for the small package is its use for individual, ready-to-serve fruit juices, tomato-juice cocktail, soups, etc., used in restaurants and hotels, at drug-store counters, on trains and planes, in vending machines and for bleacher

events conducted at sports stadiums.

A complete new line of fruit juices in 5 1/2-oz. lithographed cans has been put out by H. J. Heinz Co., bearing the "57 Varieties" label,* for standard sellers in drug stores, roadside restaurants and ice "pop" boxes. These individual-serving packages are also aimed for use in restaurant and hotel dining rooms as an attractive item for either a la carte orders or room ser-

* See this month's Hall of Fame story, p. 88.

vice. They provide a complete line of juices with no waste.

Heublein introduced last year a whole line of luxury soups—Vichyssoise, onion, black bean, jellied consommé, green turtle, lobster bisque, creamed mushroom—in single-serving cans of 7 1/2-oz. contents. These were aimed for restaurant and drug-store trade, as well as for wide distribution through grocery stores. It is Heublein's reasoning that restaurants, by



SOUPS FOR ONE are offered in 7 $\frac{1}{2}$ -oz. containers by Heublein's for department-store, food-specialty and grocery-store distribution, as well as for the hotel, restaurant and the drug-store counter trade.

stocking these individual, single-serving packages, can offer a full daily menu of gourmet specialties with no waste. The small cans also offer new market outlets for these specialties, where such luxuries would ordinarily be unobtainable.

What about "economy" sizes?

The trend to smaller sizes brings up a serious question. Does it mean the rejection of what is known as "the large economy size"?

Opinions vary on this subject. Some store operators, looking at it from the broad economic aspect, predict that the trend to smaller sizes will continue, but not merely because families are smaller or population larger, but because of changing living and shopping habits, if nothing else. No longer do people live in big houses with unlimited storage space for large quantities of foods. When they buy, they like wide variety in small units that can be easily prepared for one meal with no leftovers.

The popular conception, however, is that the small one- or two-serving sizes are a plus factor. They offer a way to widen markets, but do not seem to be gaining at the expense of larger sizes. Frank R. Coutant, president of Fact Finders Associates, Inc., speaking before the Packaging Institute last fall, said: "The belief that the trend toward consumer preference for smaller-sized packages means the rejection of the large, economy size is a challenging conception. It might be true, but our work at Fact Finders

has not shown any such trend. Our findings indicate a noticeable gain in demand for small packages, but not at the expense of large sizes; rather, the small sizes are a plus business."

The explanation, Mr. Coutant says, is simple. The big increase in new families was a by-product of the war years when girls could and did get their men. Marketers have the problem of meeting the demand of millions of small new families with package units suitable for a household of two adults—usually with a baby or two. It is a new phase of marketing. Never before has there been such responsibility or opportunity of planning to please the tastes of so many millions of present-day little families and little customers.

The experience of Arnold Bakers' with their new small-family loaf of bread bears out this theory. According to Paul Dean Arnold, president of the company, the new small-sized loaf has won many new customers, as evidenced by the fact that sales of the larger loaf have not fallen off and, in the case of Whole Wheat Plus, have actually increased. This seems to negate the theory of most bakers that a smaller loaf would be economically unsound due to the additional cost of pans and handling to produce the smaller loaf. Arnold's purchased new pans for their small loaf, which is cellophane-wrapped on the same equipment as their larger loaves, except for certain modifications.

It would be a sound idea for bakers to ask customers for their preference

in this respect. Apparently there is a need among apartment dwellers for the smaller package because several bakers, including Schmidt of Baltimore and Fischer Baking Co., Newark, N. J., have been selling successfully for quite some time what they call a pantry package, consisting of a wrapped half loaf of sliced bread.

The same plus business can be pointed out by the users of small packages for fruit juices, vegetables, soups and breakfast foods, not only for small families, but for the restaurant, counter-lunch and snack-bar trade. The Heinz company gave its business a terrific boost during the depression years by developing and putting over the idea of the "soup kitchen" for soda fountains and snack bars as a new market for small cans of soup. Small packages of crackers, sugar and other food items have also demonstrated the good reasoning of the same principle.

Industry opinions

The swing to smaller sizes is verified by reports from all sources in the food industry. In one study made last year, 75% of the food brokers and wholesale grocers replying reported an increase in the demand for smaller containers of standard canned foods. All said there seemed to be a tendency among canners and packers toward the placing of their pack in smaller units. Not one canner contacted reported any recent shift to larger container sizes.

One large glass manufacturer is planning to include the census figures showing the growth of smaller families in its salesmen's kits as ammunition for promoting the use of smaller glass containers by their customers.

The National Canners Assn. bulletins reporting the volume of packs by years show a marked increase in the use of 6-oz., 8-oz., No. 300 and No. 303 for many canned products, particularly juices (see Table I). A trend from heavy use of No. 2s to a spread of volume over No. 303s and other smaller sizes is shown for peas, corn and lima beans. Pumpkin and sauerkraut packs are being put into two or three smaller sizes rather than previous concentration on No. 2 $\frac{1}{2}$ s. Canned fruits are also showing a trend away from No. 2 $\frac{1}{2}$ s back to prewar smaller sizes—8-oz., No. 1 Tall and 303.

The trend to the small-sized container was (Continued on page 178)



TWELVE FRAGRANCES, one for each month, are packaged together in specially designed folding box (left). Labels on 6-dram bottles show through die-cut ovals to identify each flower scent. Bottles are secured to inside paperboard platform. Individual package for each month (above) contains 2-oz. bottle. Folding box has embossed baroque design. Die-cut oval reveals label; thus the same box can be used for packaging entire series in the line.

Fragrance by the month A CLEVER PACKAGE

IS PROMOTION FOR GOURIELLI'S 'FLOWERS OF THE MONTH' POPULAR-PRICE PERFUME

Spring cosmetic collections indicate a further trend toward the packaging of popular-priced lines. The House of Gourielli is making news in this connection with its "Flowers of the Month" *eaux de parfum*, which were introduced to the trade last month.

The basic idea, as the name implies, is a collection of 12 flower fragrances, one for each month of the year. The entire conception is another excellent example showing the essentiality of a packaging program as the basis for an entire promotion.

In this new line are four different types of packages. The shopper has her choice of: (1) an individually boxed 2-oz. bottle containing the fragrance characteristic of the month of her birthday, or of the birth month of the person for whom she is buying a gift; (2) a box containing all 12 of the fragrances in 6-dram bottles; (3) a box containing six of the 6-dram bottles representing the fra-

grances from January to June; or (4) another package containing six of the 6-dram bottles for July through December.

Obviously for items retailing from \$1.75 to \$3.25, packaging costs had to be watched closely, yet every effort has been made to achieve the elegance and dramatic effect demanded for perfume packaging.

Packaging started with the designing of the bottle. To give individuality, it was decided to use a private mold specially conceived to carry out the flower idea with a graceful shape suggesting re-use as a bud vase. The scrolls and swirls of the design are adaptations of authentic baroque, based on exhaustive research by the design staff of the House of Gourielli.

The 6-dram bottles are smaller versions of the same bottle design. The tapered area represents an achievement in modern glass making, according to the glass manufacturers, who say they have never before made

in quantity a bottle with such a narrow section. Closures are white urea plastic, a decorative shape for the large bottle and standard stock design for the smaller containers.

All of the bottled fragrances in the line are housed in specially constructed folding boxes with scored hinged lids, full-color printed. The box for the 2-oz. individual bottle is made to look like a white baroque picture frame, richly embossed with gold scrolls and the Gourielli crest. Sides of the box are sloping. The lift-up cover contains a die-cut oval through which the bottle label may be seen. There is a series of 12 labels, one for each of the flower scents. Each is printed with a five-color reproduction of each flower. Thus the same box may be used for each of the 12 flowers of the month, since each different label showing through the die-cut oval identifies the package with the month for which it is intended.

Boxes (Continued on page 186)



Adjustable cartoner

PHOTOS COURTESY R. A. JONES & CO.

The place of the fully automatic cartoning machine is well established. Wherever there is large-volume, day-in-and-day-out production of any standardized item capable of being mechanically loaded into the carton, efficiency reaches its peak in the fully automatic cartoner. Recent cost studies of 97 users of such machines, handling bottles, jars, tubes and other products, have revealed average savings of \$100 to \$200 per machine per day.*

But what of the smaller company—or any company—unable to support with a single product the volume of 30,000 or more packages per 8-hr. day that the fully automatic cartoner demands? What of the company producing a wide range of products of many sizes and shapes, in relatively short

runs? Fully automatic machinery is expensive machinery and idle time will soon wipe out the savings that might otherwise be shown. And in almost every industry there are some odd-shaped products requiring hand loading that it simply can't handle automatically.

Machinery makers have not been unaware of these unfilled needs. Now, in the plant of the Circle F Mfg. Co. in Trenton, N. J., there may be seen in daily operation the first line of semi-automatic cartoning machines handling an unprecedented range of sizes and capable of change-over from one size to another with unheard-of speed and ease—with no tools and only minor change parts.

Incorporating simplified engineering principles and postwar mechanisms never before used on a machine of this type, the rugged new machine,

built on a production line, is said to be priced at less than \$6,000—as against \$10,000 to \$12,000 for its fully automatic cousin. It will do virtually everything the fully automatic will do (and almost as fast), according to the Circle F company, except that the contents of the cartons must be loaded by hand—a feature which, of course, is essential to its great versatility.

Speed is variable from 25 to 120 cartons per minute and, within that range, is limited only to the speed with which one, two or three girl operators can grasp the contents and drop them into the constantly moving, vertically held, opened cartons. Cartons—reverse tuck, straight or airplane type—are automatically fed, formed, held open for the load, closed and discharged.

With equal facility the machine

* "97 Cost Comparisons," published by R. A. Jones & Co., Inc., Cincinnati, Ohio.

1. FIRST OF ITS KIND, semi-automatic cartoner with quick adjustability to a wide range of sizes is shown in operation at Circle F Mfg. Co., Trenton, N. J. Single operator loads constantly moving, upright cartons two at a time at speeds up to 120 a minute; all other operations are automatic, from the unique vibratory carton feed at right to the discharge at left.

will handle cartons as large as $3\frac{1}{2}$ in. square by 8 in. long or as small as $\frac{1}{2}$ by $\frac{1}{2}$ by $2\frac{1}{2}$ in. long (Fig. 2). Change-over is accomplished by moving a series of small ball-grip levers which control the adjustable parts and lock them by friction at precalibrated settings according to the three dimensions of the carton.

Change-over from one extreme size to the other can be made, according to Circle F engineers, in 20 to 30 min. and smaller changes in even less time.

magnet in the vibratory unit directly below. Actuated by these imperceptible impulses, the cartons are pushed gently and steadily toward the pick-up. The feeding magazine is a separate mechanism and the vibration is not transmitted to the machine.

Another unusual feature is the use of a magnetic clutch for actuating the machine proper. Continuous voltage control gives the desired starting and running torque, with instant release to stop the machine movement without coasting. The magnetic clutch can be adjusted to slip on the slightest overload, as an added safety measure. The 1-hp. electric main motor is equipped with a variable-pitch pulley which gives infinitely variable control of machine speed.

Circle F's requirements

While its product is not generally thought of as typical of packaged products, the problems which the Circle F Mfg. Co. had to solve are

tons. The packaging problem is identical to that of producers of hair tonic or tooth paste, who are forced to alternate production between three or four sizes of bottles or tubes.

Previously, the company says, there was no cartoning machine sufficiently versatile to meet Circle F's requirements. Cartoning was strictly a hand operation and an expensive bottleneck in a business called upon to meet rapidly changing rush orders and operating on a low margin for packaging costs.

With manual loading of the conventional end-opening tuck carton, the operator was required to reach for and open the carton, close the bottom side flaps and insert the tuck flap, reach for and insert the load while holding the carton in one hand, then close the top side flaps and insert the tuck flap.

With the new machine the operator's effort is reduced to the single motion of grasping the load and drop-

HANDLING A MULTITUDE OF SIZES WITH UNPRECEDENTED EASE OF CHANGE-OVER . . . LOADED VERTICALLY BY HAND AT HIGH SPEED . . . NEW SEMI-AUTOMATIC MACHINE FILLS A BIG GAP IN MECHANIZATION OF PACKAGING

Upright position of the cartons is of course essential to hand loading, in contrast to the horizontal movement used in automatic loading. An important contribution to simplification in the new machine is the fact that the cartons are held vertically in the magazine, fed standing vertically and held that way all the way through—avoiding a complex mechanism that would otherwise be required for turning the cartons.

This is made possible by a simple and unique new magazine and vibratory feeding mechanism (Fig. 3). The horizontal magazine is completely open at the side and top for easy filling. The flat cartons are placed, standing vertically, on a supporting rail and held upright by a freely moving wooden retaining block at the rear. The rail is vibrated 120 times a second by the action of a powerful electro-

typical of these which the new machine is intended to meet throughout the packaging field.

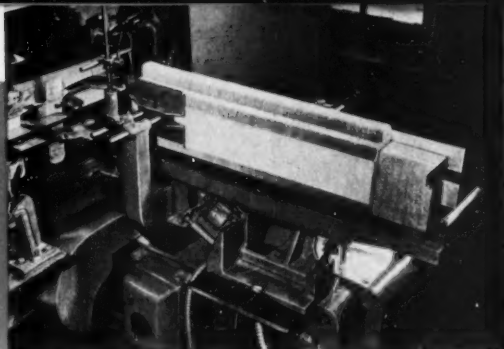
Circle F is one of the nation's busiest producers of small assembled electrical parts—switches, sockets, receptacles, etc. Each of its scores of products comes in many variations of size and shape. Production and packaging lines are shifted frequently from one item to another. None of the products is sold to consumers, but each must be packaged in a printed folding carton for protection and identification on the stock shelves of electrical jobbers, contractors, etc.

The packaging department is required to shift quickly from a lot of perhaps 25,000 switches in $3\frac{1}{2}$ -by- $1\frac{1}{2}$ -by- $1\frac{1}{2}$ -in. cartons to, say, 50,000 receptacles in $4\frac{1}{2}$ -by- $1\frac{1}{2}$ -by- $2\frac{1}{2}$ -in. cartons and back again to a lot of switches in $4\frac{1}{2}$ -by- $1\frac{1}{2}$ -by- $1\frac{1}{2}$ -in. car-



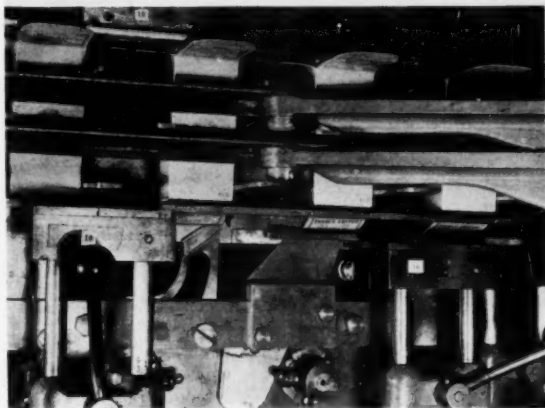
2. RANGE OF SIZES is illustrated by these maximum and minimum cartons. Machine has pre-calibrated settings for a multitude of sizes between these extremes and change is made in a few minutes without the use of tools. Odd shapes and sizes are handled with the same facility as those of regular shape.

Sequence of operation

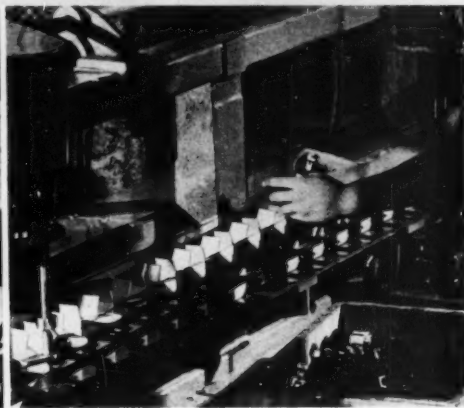


3. CARTON MAGAZINE is open at the top and side for easy loading; cartons stand vertically. Electromagnet below vibrates the magazine 120 times a second; the free-sliding retaining block at right helps to push the cartons on slight downgrade to the machine.

6. BOTTOM TUCK is closed by rotary mechanism in four stages. First blade breaks flap at score; second blade enters carton to square opening; tuck flap is entered at an angle and, finally, the flap is closed and bottom squared up.



7. OPERATOR LOADS two cartons at a time as they travel past her, moving both hands in unison from tote box to open cartons, dropping products in. Additional operators can add other parts or inserts.



ping it into the carton as it moves in front of her—and this is done two at a time.

Circle F executives estimate, conservatively, that they have achieved a 250% increase in efficiency, even when the machine is run at comparatively slow speeds.

How it works

Steps in the operation of the machine are shown in the accompanying sequence of photos.

As each flat carton reaches the pick-off end of the vibrating feeder (Fig. 4), it is gripped by two vacuum cups on its face, pulled from the magazine and opened against fixed guides. A sliding transfer mechanism with two

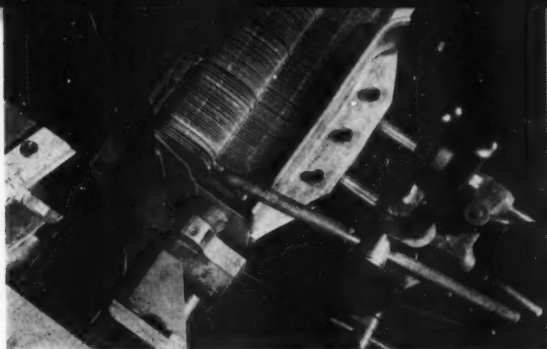
vanes (Fig. 5) grips the carton at the moment it is fully opened and moves it into position to be picked up by the adjustable lugs on the continuous transport chain which thereafter carries it in a straight line through the machine. The bottom tuck flap can be coded at this point if desired.

During the transfer operation, both the leading and trailing bottom side flaps have been closed. The transport lugs move the carton on through the bottom tucking operation, in which a rotary mechanism (Fig. 6) functions as follows: one blade breaks the tuck flap positively on the score line; another pierces the full width of the carton to present a definite, uniform opening for the tuck flap, regardless of nor-

mal carton variations; the tuck flap is eased into the carton at an angle, to avoid stubbing; at the fourth and final station the tuck is pushed in completely, squaring up the bottom end of the carton.

Held securely upright by the transport lugs and guide rails, and with the top flaps wide open, the cartons are carried, closely spaced, through the loading station—a 5 ft. area completely open for top loading. One, two or three operators can work in this area, depending upon the speed of operation desired or the number of pieces to be put in each carton. In some cases one operator may drop in the product and another insert a prefolded leaflet.

Operators can work either standing

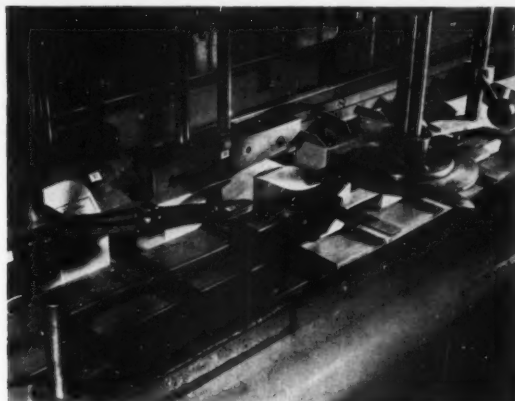


4. CARTON PICK-UP, viewed from above from rear of machine. As each flat carton reaches the pick-off end of the vibrating feeder, vacuum cups seize it on the face and pull it open against fixed guides. The carton is partially opened in the magazine and it is fully opened as it contacts the stationary opening guides.



5. TRANSFER MECHANISM, which engages the carton as the vacuum cups release it and move it along the line, fully opened, into position to be picked up by transport lugs. During the transfer, bottom side flaps of carton are closed.

8. TOP FLAP CLOSING is started on the trailing flap by a spring-mounted star wheel which will slip and stop the machine if the load in the carton is not properly in place. Leading side flap and tuck flap are then closed.



9. CARTONS ARE DISCHARGED, at Circle F Co., onto revolving accumulator table for hand loading into master and shipping cartons. Other installations might take them by conveyor to casing machines.



or sitting. Loads can be brought to the machine in trays or on belt conveyors passing either in front of or behind the line of moving cartons. The manufacturing set-up at Circle F does not permit the use of conveyors, so the electrical parts are brought in tote boxes and placed on stools between the operator and the machine.

In no case need the operator (Fig. 7) move her hands more than six or eight inches. With both hands free and moving in unison, she loads two cartons simultaneously, simply moving the load to the carton mouth and releasing it to gravity.

Particularly important in this combination of manual and machine action is the fact that the cartons move

past the operator in perfectly smooth, constant motion. The operator is not disconcerted and fatigued trying to hit cartons that stop and start, accelerate and decelerate. She works with a smooth, unhurried rhythmic motion. At the same time, the operator is automatically paced by the machine—an added advantage over a straight hand operation.

With a single simple load, such as a bottled product, a single experienced operator can keep up with the machine's top speed of 120 a minute, it is said.

Operator efficiency is equally striking when each carton receives more than one piece. Since the inside of the carton is completely visible, the second

and third operators can readily see the space available for their portion of the load. Corrugated liners, leaflets, droppers and complicated multiple loads—such as are frequently required in the drug industry—can easily and quickly be inserted in the upright carton, although this is a difficult operation when the carton is held horizontally.

After the load has been inserted, the trailing top side flap is closed by a star wheel (Fig. 8) which incorporates an interesting control feature. The wheel is spring mounted and if the load is not completely within the carton the wheel will slip, stopping the machine instantly and preventing damage to the load. The machine can-

not be started again until the error is corrected.

The leading top side flap is closed by a stationary guide and the tuck flap inserted and closed in four close-coupled operations. The carton is then discharged on a short conveyor belt (Fig. 9), either to an accumulator table or to another conveyor belt to the casing station.

Change-over

The photographs show some of the approximately 20 hand levers which

control the carton-size settings at various points on the machine. Some of the close-ups also show the calibrated markings engraved right on the adjustable parts and the numbers which identify these parts in relation to calibration charts furnished by the machine manufacturer for each size of carton to be used. It is a simple matter even for a non-mechanic to follow these charts step by step and effect a size change-over in a matter of minutes. Fig. 10 shows a portion of a typical calibration chart for a carton

1 1/2 in. thick, 2 in. wide and 6 in. long.

Not all of the levers must be moved for each change of size, but in each case the simple procedure (Fig. 11) is to loosen the ball-grip clamping lever, move the part to the setting on the scale indicated by the calibration chart and lock it again with the lever. Even if all three carton dimensions are changing, these adjustments can be made at the appropriate station for thickness, width and length of the carton—all in surprisingly little time.

The three chains comprising the carton transport, which may be seen in Fig. 12 at the discharge end of the machine, can be quickly adjusted. The bottom and top chains carry lugs which contact the trailing side of the carton. The vertical distance between these chains can be varied according to the height of the carton, but the relative horizontal position of the two lugs is the same on all carton sizes.

The center chain carries lugs which contact the leading side of the carton. This chain can be advanced or retarded to provide the correct horizontal opening between lugs for various widths of carton. The bottom and middle chains remain fixed in the vertical plane. When the top chain is raised for a taller carton, the entire top chain, supports, sprockets and top carton rail move up or down as a unit, driven by a common source.

Potentialities of machine

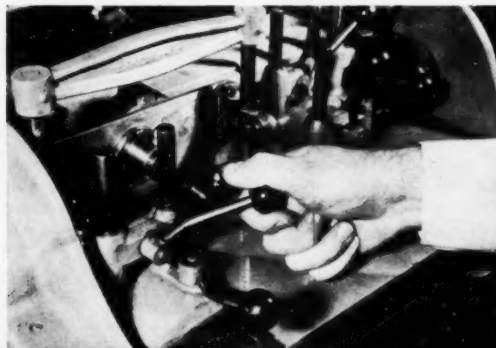
Wide interest aroused by this machine since the initial installation at Circle F indicates its varied field of usefulness.

It is of interest not only to the small manufacturer with total volume insufficient for a fully automatic machine, but also to the largest companies in special (Continued on page 186)

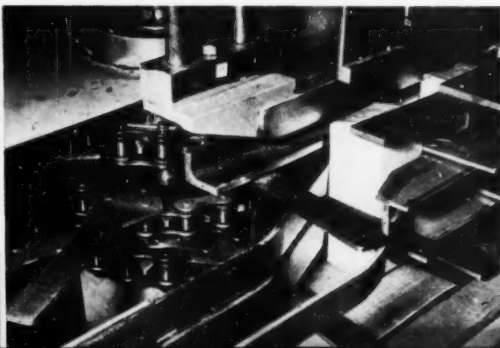
Change of size			
Sheet 1 of 3			
- THE CONSTANT MOTION VERTICAL CARTONER -			
(LOCATION OF ADJUSTERS FOR A CERTAIN SIZE CARTON)			
Carton Size: 1 1/2" Thick 2" Wide 6" Long			
Carton Reference No. 3			
Name of Adjuster	Position of Adjuster		
	Vertical	Lateral	Longitudinal
1. Systron Rail - carton magazine	None	None	2 3/16
2. Carton magazine Side Rail - (long)	None	None	1 1/4"
3. Carton magazine Side Rail - (short)	None	None	1 1/2"
4. Carton retainer - (inner end of long carton magazine rail)	2"	None	
5. Top and Bottom Carton Side Flap Holder Pins		1 1/4"	None
10. Top Tuck Flap Deflector. (Where carton moves from magazine to open position)	1 1/8"	None	None
11. Bottom Tuck Flap Deflector.			

10. CALIBRATION CHART, prepared for each carton size shows unskilled help where to move numbered adjusters on machine's precalibrated scales. Some adjustments require a change in only one direction.

11. HAND LEVERS lock each adjustment at various points on machine. Here top carton guide is being moved to position corresponding with length of carton. Right-hand vertical rod is calibrated in 1/16-in. division and correct setting is found by reference to chart.



12. THREE CHAINS comprising carton transport can be quickly adjusted. Vertical distance between top and bottom chains can be varied according to carton height. Center chain can be advanced or retarded according to carton width. Bottom and middle chains move vertically as a unit.



New figure

GOLDEN BLOSSOM HONEY SHOWS HOW SUBTLE VARIATION

OF JAR SHAPE CAN PRODUCE A MORE EFFECTIVE AND MORE PLEASING PACKAGE

How a subtle alteration of shape can make a package immeasurably more effective is demonstrated by the new elliptically shaped glass jar recently adopted for Golden Blossom brand honey, distributed by The John G. Paton Co., Inc., New York.

The label design and its size, the size and the quantity of product the jar contains—all are exactly the same as for the old jar; yet at a glance, the difference between the new Golden Blossom honey jar and the old one is immediately apparent.

By virtue of the new shape, more honey is visible when the jar is seen broadside and it is seen much more impressively. With the new perspective thus given to the contents and label, the total eye appeal of the newly designed package has been increased greatly.

When it is picked up and opened, the new honey jar is also more pleasing to the hand, on two counts. The new shape fits right into the natural curve of the hand, permitting the user to obtain a good grip without shifting his hold on the jar once it is grasped and, because the new jar has a continuous thread cap instead of the lug type used on its predecessor, opening is easier.

The new shape retains all the practical features of the old stock round jar—adopted as a wartime measure—in so far as filling and closing are concerned, according to J. H. Paton, president of the company.

Indeed, the handling experience the company had with the stock jar was so good that the company was loathe to give it up and return to prewar

packages—a lithographed vacuum tin and a special "high style" private-mold jar.

However, it was felt that the stock-jar honey package needed more "quality" appeal.

Although a complete redesign at first was contemplated, the designer consulted by the company surprisingly recommended changing only the jar shape and the closure. In his opinion the design of the present label (done by another designer) was excellent and its well-established quality appeal would be enhanced further by the broader presentation it would get on the new jar.

He did, however, redesign the decoration of the new jar cap to pick up

the three small "bee's-wing" designs that appear on each side of the top half of the label, using them in similar fashion as a border to set off the name printed in the label type on the closure top.

The designer also recommended the use of two mouth sizes for all three jar sizes. This made it possible to standardize on two sizes of closure and to develop the broader shape so that no modification was necessary on the company's existing filling and capping equipment.

CREDITS: Design, Robert G. Neubauer, Inc., Bridgeport, Conn. Jar and closure, Anchor Hocking Glass Corp., Lancaster, Ohio.

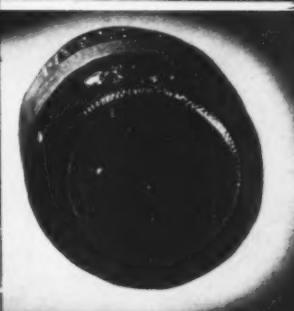
NEW



OLD



REDESIGNED JAR holds exactly the same quantity of honey as old, but display surface and optics are greatly improved. Threaded closure replaces lug type and label motif is repeated on cap. Cross-section view illustrated below shows the change in jar shape that accounts for the improvement in appearance. The new elliptical shape of the jar is more pleasing to the hand.



Twist dispenser

NEW RIGID CONTAINER WITH A TWISTING INNER SAC

COMBINES THE ADVANTAGES OF A GLASS JAR AND COLLAPSIBLE METAL TUBE

Without fanfare, Saks Fifth Avenue quietly put its private-brand cleansing cream on sale during the first week of January in a container of unusual new construction that eventually may have considerable possibilities for the packaging of other toiletries, deodorants, medicinal and household creams and waxes.

The new, patented container is neither a collapsible tube nor a jar but,

in a way, combines the features of both in a development which has been in the experimental stage for more than a decade. Although announced as being ready for commercial production about a year ago (see MODERN PACKAGING, March, 1949, p. 130) the Saks package is the first actual on-the-market application.

On the counter, the package looks like a small metal-ended fibre canister

of 1 1/2-in. diameter with a threaded plastic screw cap, but there the similarity ends. In reality it is a bag in a cylinder. The cylindrical wall is a spirally-wound rigid sheath of fibre-board over which is secured a wrap-around label. Inside this rigid sheath, an open-mouthed extruding bag of polyethylene film is held in place by a metal breast on the top circumference where the bag joins the sheath. The

TO DISPENSE contents, user merely turns bottom disk, forcing extrusion of a controllable amount of the cleansing cream. Maker claims extrusion of 99% of contents.



IN APPEARANCE, the new dispenser container looks like small fibre canister with metal ends and plastic screw cap.

closed bottom of the polyethylene bag is folded and drawn together into a seal and fastened to the center of a circular, flanged spring-stamped disk which is used to form the base of the cylinder.

When this base is turned, a torque motion at the bottom of the bag is created which forces the extrusion of a controllable amount of cleansing cream through an opening provided in the stamped metal top of the container. A ratchet mechanism in the base sustains the tension of the spring. A screw cap fits over the top opening when the container is not in use. The bottom spring disk is covered by a paper disk on which are instructions telling which way to turn the base for dispensing contents.

The new package is said to have all the advantages of the dispensing features of a collapsible tube in that the user, by merely turning the bottom disk, may extrude as much of the product as desired, remove it from the top of the opening and neatly close the container with the screw cap until the next application.

The manufacturer of the container claims it gives as much as 99% extrusion of product in comparison with 85-95% extrusion from conventional collapsible tubes. The rigid outside wall of the container assures continuance of original shape so that there is no unsightliness of exterior appearance due to squeezing, the extrusion activity being completely concealed inside the package.

The container will stand on its base permanently and thus, with wrap-around labeling, assures constant, unmarred and ample display surface for trade and product identity. The fact that the package stands upright puts it in a class with glass jars, bottles and canisters, but due to its torque action, it has the added advantage of dispensing the desired quantity while protecting the remainder without touching. There is no digging in with the fingers to obtain contents as must be done with conventional wide-mouthed jar-type containers.

The light weight of the materials used—paperboard exterior and the plastic bag—provides a container that saves shipping weight and is also convenient for the present-day traveler who prefers to carry light-weight containers.

Polyethylene was selected by the manufacturer as the material for the inner bag in the Saks application be-

cause of its elasticity and its ability to withstand an amount of manipulation far in excess of that which it receives in practice without cracking or tearing. Polyethylene is also said not to deteriorate over a long period of time and it provides a material chemically inert to a wide variety of substances both alkaline and acid. However, other flexible films may be adopted for other applications, says the maker, to suit the requirements of the product packaged.

The containers are completely assembled before filling. They are filled through the top orifice and may be filled on any type of standard jar-filling equipment, it is said, by adjusting the size of the filling nozzle to the size required for the application. The Saks packages are being filled on conventional jar-filling equipment with only slight adjustment by a custom packer who has facilities for doing this type of specialized job.

It is too early yet to predict the future of the new container. From the construction standpoint, it appears to offer many opportunities for interesting applications. According to the manufacturer, it will be possible in future applications to dress up the appearance of the container by the use of colorful plastic rings and parts in place of the metal now used at top and bottom. There is also opportunity of using colorful decorative papers, foils and striking private designs to enhance exterior appearance. The possibility of using a plastic extrusion in place of the fibreboard body also is being studied.

In fact, the possibilities for dressing up exterior appearance should be one of the most important advantages, he says, because the user has all the convenience of a collapsible tube, with the additional feature of permanent display areas due to the rigid walls of the container. Whereas there are many successful dispenser-type containers for liquids, he points out that the new container, designed expressly for dispensing pastes and creams, is one of the first in this field, other than the collapsible tube, to achieve actual commercial application.

Directions about how to use the new Saks container were printed only on the bottom. However, Saks sales people felt this was no handicap and that little additional information was necessary. They simply demonstrated how to turn the bottom disk for dispensing the cream and this was apparently all the instruction customers



TRANSPARENT MODEL reveals principle of the new container—a polyethylene bag inside a cylinder. Bag is secured to the cylinder at the top. Closed bottom of bag is folded and sealed to spring-stamped disk forming base of container. Product is extruded when base is turned.

required. The particular advantages of the new container were also suggested for such toiletries as deodorant and shaving creams. With a deodorant cream, the container can be applied directly to the skin, without the necessity of touching the cream with the fingers, it is said.

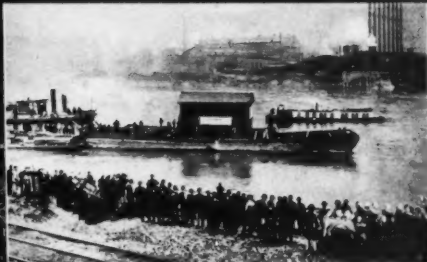
The first of these containers is available only in the 1 1/2-in. diameter, but they may be heightened or shortened in that diameter to suit individual requirements. The container can be made in other sizes, however. The manufacturer says that containers of this type can be produced in a range of sizes from fractional-inch diameters up to steel-drum sizes.

CREDITS: "Twistube" container, General Cap & Container Corp., New York. Caps, molded by Mack Molding Co., Wayne, N. J., of American Cyanamid "Beetle" urea formaldehyde. Labels, Yorkshire Press, New York. Designing and styling, Lippincott & Margulies, Inc., New York.



HEINZ

57 VARIETIES



THE LITTLE HOUSE "where we began" is today enshrined in the very heart of Heinz' world-wide food empire, amid factory buildings of Pittsburgh headquarters. Thousands gathered in 1904 (above) to see original 1896 homestead at Sharpsburg floated on a barge a few miles down the Allegheny River.

The little brick house on this month's cover stands more than symbolically behind two of the world's most famous food packages. For it was in the kitchen of this house in 1869 that young Henry John Heinz put up the first of his renowned 57 Varieties—a few bottles of grated horseradish, which he peddled from door to door in Pittsburgh.

The little house, reverently removed in 1904 from its original location a few miles up the Allegheny River, is dwarfed today by the 20-odd H. J. Heinz Co. buildings that tower above it at the company's Pittsburgh headquarters. It is the literal heart of a world-wide food-processing empire that now comprises 18 factories on three continents, producing in a single year a billion packages of foods worth \$175,000,000 and employing, in the United States alone, 1,500 salesmen who call on 200,000 grocers and 100,000 restaurants.

It is a fitting monument to the man who, generations ahead of his time in this knowledge of packaging princi-

ples, made his name and brand a household word in 200 countries and territories around the globe and who did more, perhaps, than any other man to create acceptance for glassed and tinned processed foods.

While the intrinsic value of the H. J. Heinz Co.'s contribution to packaging is incalculable, its current real contribution is definite and calculable. It is one of the largest single consumers of packaging. In the last fiscal year, \$21,894,635, or 17%, of the company's United States sales income of \$126,146,500 was used to pay for packaging materials. This was more than 50% as much as the cost of raw food products.

The ketchup bottle and baked-beans can which appear on our cover have been nominated for packaging's Hall of Fame merely as representative of the two basic forms of containers in a line of products which has grown far beyond the storied 57 Varieties to a present-day total of about 135. Actually, the honors belong to the entire line, to which the same fine principles

of packaging and labeling have been consistently applied.

Numbering among its principal products—in addition to ketchup and baked beans—such items as baby foods, soups, the famous pickles, cooked spaghetti, vinegar and a bewildering array of condiments, the Heinz Co. has a clear idea of its place in the food industry. H. J. (Jack) Heinz II, 40-year-old grandson of the founder and present head of the company, recently explained to a Senate committee in Washington that Heinz "is not a canner of fruit and vegetables . . . (but) a processor of recipe products."

The little house "where we began" has more of continuity in it than just bricks and mortar that compose its symmetrical whole. The principles that made the founder of the business a world-wide success before he died at 75 in 1919 have been remarkably handed down through his son Howard (who died in 1941 after running the company for 22 years) to his grandson Jack.

To boil a complex story down to its

essentials, these principles, as they apply to packaging, include:

A fine appreciation for memorable trademarks and slogans. (The key-stone label, the pickle trademark and the "57 Varieties" slogan each ranks in its own right as among the "most famous" in all packaging.)

A crusading insistence on purity and quality. (The original Heinz was a leading agitator for the Pure Food Laws, spent millions on advertising convincing the public of the purity of his products and had one of the first quality-control laboratories in the food industry.)

A great sense of showmanship in advertising and merchandising. (Is there an American over 30 who hasn't at some time treasured one of the 50,000,000 Heinz pickle pins, or seen the strange device "57" emblazoned in 10-ft. concrete letters on some unexpected hillside?)

Development of principles

The very first package that Heinz ever used established some of these principles. The horseradish he sold in 1869 was all horseradish and it was packed in clear glass bottles—in contrast to the opaque or cloudy glass bottles then in use which frequently concealed wood fibre, stems and other adulterants. The housewives had confidence in his product and the little business enterprise was an immediate success.

Soon he had added pickles, mustard, ketchup, vinegar (he was the first to put vinegar in a bottle), jellies and jams, and mincemeat and by 1871 had expanded from his home to the first small factory. The earliest extant packages show the use of ceramic crocks, jugs, demijohns and wood firkins, as well as glass bottles.

Nobody knows just what inspired the adoption of the keystone shape on the label, but as a trademark it was a

natural for a rising young company in the Keystone State and one of the several partnerships through which Heinz passed in the early days was known as the Keystone Pickling & Preserving Works. It reflects, too, his lifelong interest in masonry construction.

To make it even clearer, some of the early labels had the shape of a key stretched diagonally across the face of the keystone. The essential point is that, once adopted as a recognition device, the keystone was never omitted from the label and it has for years been so peculiarly identified with Heinz that, in recent tests of consumers' recognition of blank trademark shapes.

it has scored almost 100%. From 1887 on, ketchup and other bottle labels were die cut in whole in the key-stone shape.

Records show that the keystone first appeared around 1880, on a few barrelhead labels. It was registered as a trademark in 1885.

Because the company in the early days was known principally as a pickle packer, the pickle emblem began to appear as a subsidiary trademark on the labels for other products as early as 1889—providing a tie-in and recognition factor. The pickle trademark really rode to fame on the little green pins that Heinz passed out at the Chicago World's Fair of 1893—one of

THE 57 VARIETIES have grown today to nearly 135—all but two of which are packaged in either tin or glass. Worcestershire sauce is the single exception to the use of famed keystone as dominant trademark.





KETCHUP CHRONOLOGY is complete from 1880, with single exception. Label has remained virtually constant since 1916, but much research has gone into closures and bottle shapes for better handling and pouring. Note that the keystone cut-out label dates back from 1887.



the neatest promotion stunts in merchandising history, the story of which will be told later.

Heinz's talent for turning the commonplace into an unforgettable trademark is nowhere better exemplified than in the well-documented story of how he hit upon his "57 Varieties." One day in 1896, riding uptown on New York's Third Ave. Elevated, he was brooding over the need for a short, catchy slogan that would express the growing variety of his products. His eye was caught by a shoe-store sign announcing that the emporium carried 21 different styles of shoes. He started counting up his own products in terms of varieties. He passed 57 and went to 59 . . . 63 . . . 64 . . . But he kept coming back to 57. There was something about it he liked. It slipped around easily on the tongue—had a potent, almost mystic sound. Then and there Heinz—a man of whom it was said that he never walked if he could run—jumped off the train, ran to the nearest lithographer's and before nightfall had the presses turning out the first cards with the slogan "57 Varieties."

Today the simple numerals, "57," reared in a huge electric sign are sufficient to identify the Heinz plant at Pittsburgh and in every civilized

country in the world the numbers will be instantly accepted as meaning "Heinz products."

Label design

Blessed with three simple, priceless, recognition elements, in addition to the name "Heinz" itself, the company has for years maintained a thoroughly modern simplicity, balance and un-

cluttered appearance in its labels, bespeaking quality and good taste. The labels that appear on the two cover packages are in no essential way different from those used on the same products 30 years ago. They were sound and functional then as today.

This is not to say that at Heinz labels are ever taken for granted. Among the many qualities the second- and third-generation Heinzes inherited from the founding father was a sense of design, balance and proportion. Old H. J.'s father was a builder with a fine architectural sense, as evidenced by the lines of The Little House, which he constructed with his own hands. H. J. had a yearning for architecture; he learned brickmaking and brick-laying was his hobby.

According to Arthur W. Baum, writing about the Heinz family in the June 25, 1949, issue of *The Saturday Evening Post*, Grandpa Heinz was offended by lack of symmetry not only in his buildings and products, but anywhere, and he customarily carried a pocket ruler so that he could capture the dimensions of anything he saw that appeared to be particularly graceful in line. Company officials learned that they, too, had better carry pocket rulers, since they might be asked for measurements of unexpected things at unexpected times, such as the width of a street that once struck H. J. as being just about right.

Like his father and grandfather before him, Jack Heinz—who had a keen interest in the fine arts at Yale—takes a great personal interest in package

FOUNDER HEINZ is shown in 1907 in a typical activity—inspecting crops and talking to workers in the field. No detail escaped his watchful eye.

HEINZ I



GRANDSON HEINZ, now president, inherited his grandfather's energy and organoleptic sense. Here he gives his verdict on a new product.

HEINZ II



design and is the final authority in his company on all package and label changes—a prerogative that all three generations have exercised with notable good taste. His associates say that when a new or revised label is under consideration, it is the expected thing to find Jack in his office, with scissors and paste pot, re-arranging the elements of the label.

The Heinz labels on canned foods are conspicuous for the absence of one element recently considered a "must" by practically all competitors—the appetite-perking, full-color vignette of the product ready to serve. In addition to the virtue of being different, there are several reasons for Heinz' nonconformance—and, in the light of the sales figures, who is to say the Heinz viewpoint is wrong?

For one thing, it is inconceivable that the keystone emblem could ever be subordinated to a product illustration. The keystone identifies Heinz baked beans quicker than any illustration could and Heinz executives are—with justification—smug enough to believe that nothing could stimulate the appetite faster than the realization that the food is of Heinz' famous quality.

Until recent years there was apparently a feeling that no picture-on-a-label could do justice to the goodness of the product. With modern techniques of color photographs and reproduction, this objection may no longer be valid. There are some indications that policy may be changing.

The can of Heinz Cooked Spaghetti with Meat recently marketed by Heinz' Canadian subsidiary (see illustration on p. 94) may be significant. With no loss of prominence for the keystone emblem, a full-color reproduction of a casserole filled with the product has been inserted in a band at the bottom of the front panel. A few other current labels have similar small vignettes on the back, rather than the front.

Rather than appetite appeal, which they feel is unnecessary, the Heinz executives concede that the product vignette serves a purpose as variety identification. For a company that markets 12 varieties of soup, 31 varieties of pickles, 24 varieties of baby food and three kinds of baked beans, this may be important. Although the company was among the first in its field to adopt color codings of label backgrounds to distinguish variety (blue for pork and beans, green for vegetarian beans and yellow for Boston-style beans), one baked-bean

can still looks, to the casual purchaser, very much like another and the supermarket shopper is notoriously lax about reading the copy on labels.

Also on the way, on a test basis at least, are a couple of Heinz labels that break with austerity by arranging some amusing and appropriate cartoon characters around the keystone border.

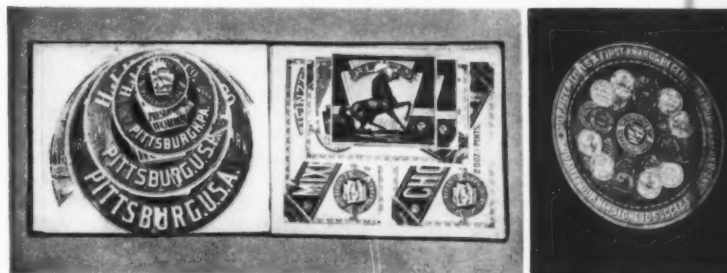
For those with a nostalgic remembrance of the pickle-pin souvenir—a cute little nubbly green gherkin arched downward at the ends, someone has said, "like the mouth of a small child just ready to burst into tears"—it is sad to report that this trademark is losing some of its prominence on labels. Present thinking is that a pickle is a bit incongruous with such products as beans and spaghetti, so a move is under way to take it entirely off canned-food labels and restrict it to glassed condiments like pickles, relishes, sauces and ketchup.

Package forms

From the beginning, the Heinz company has followed a policy that might be described as glass where



EARLY BOTTLES preserved in Heinz museum include, at lower left, the very first bottle in which H. J. Heinz packed grated horse-radish in 1869. Originally of clear glass, it has now become discolored with age.



BARRELHEAD LABELS of 1880's are preserved in old label book (left) showing the first use of keystone mark and the prancing black horse denoting "horse" radish. Medal collection (right) marks barrelhead label.

EARLY PACKAGES included ceramic crocks, appealing for their re-use value. Ornate, full-color labels were popular at turn of century.



glass belongs, metal where metal belongs.

Since the first horseradish bottle, glass has been used wherever visibility was desirable, or where some functional feature was best supplied by glass—as in the shaker top for Worcestershire sauce. Heinz does not believe, however, that a cold mass of soup or cooked spaghetti is very appealing to the eye; for all such products the tinplate can has been used.

At present, approximately 50% of the dollar volume of Heinz products is packed in glass; 50% in metal. Paperboard cartons are used only for a couple of their dry baby-food cereal products.

As the world's largest producer, Heinz has set the style in ketchup bottles. For this it has been praised and blamed, depending on how you look at it. The difficulty of getting ketchup out of a bottle is one of the most frequent complaints at consumer clinics. Heinz wants only to give the public what it prefers and it has found that the public will not buy ketchup in a jar. Chile sauce in a jar, yes—but ketchup, no.

Accordingly, a great deal of study has gone into compromises that will retain the traditional ketchup-bottle shape but make it easier to dispense from. The photograph on p. 90 shows the evolution of the Heinz ketchup bottle from 1880 to the present day. Viscosity of the ketchup is carefully controlled to give maximum pourability short of complaints that

CONTRAST between old hand-packing practices and modern packaging methods is strikingly shown by this typical scene of a packaging department in 1890 and the present-day can-making department with a capacity of 1,500,000 cans a day. Photo at far right shows a pork-and-beans filling and canning line with the empty cans moving in from the overhead conveyor at right. Beans and sauce are automatically filled, but pork must be placed by hand.



it is watery. The differences between the 1940 bottle and the present one (essentially the same) and the war-time version used from 1944 to 1946 may seem minor but, according to Heinz researchers, the longer slope of the neck on the current bottle reduces the angle and makes it considerably easier to pour from; also the opening has been increased from 28 mm. to 30 mm. The lower center of gravity of the modern bottle is popular with restaurateurs; it makes it less likely to tip over.

Another great problem with ketchup is its susceptibility to oxidation and blackening on exposure to air. The blackened, coagulated top of the old ketchup bottle with a threaded metal cap was a pretty messy sight. Complaints on this score have been virtually eliminated since 1940, when

Heinz standardized on the vapor-vacuum type of push-on cap.

The greater exposure to air at the top is another argument against the wide-mouth ketchup jar. The Heinz people believe that their present package is the best solution, all things considered; once you free that first glob of ketchup in the neck of the bottle, they say, the rest is easy.

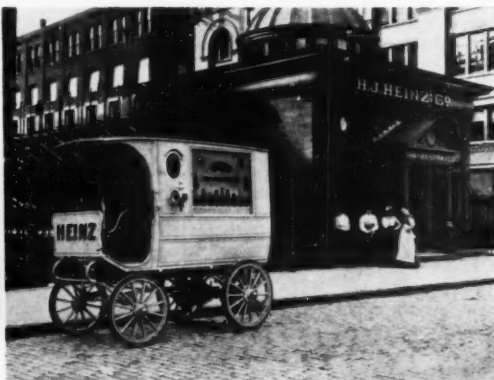
Quality control

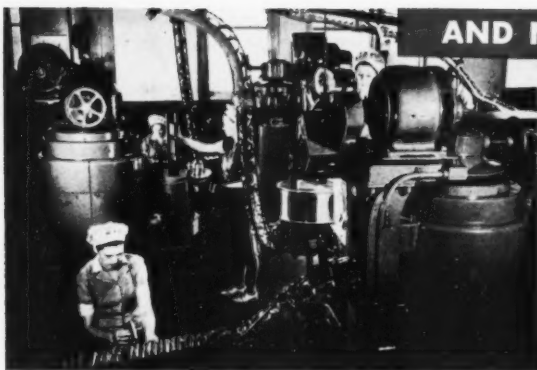
"Anything that's Heinz is safe to buy" was for years as familiar a phrase in Heinz advertising as "57 Varieties." Vowing from the first to produce only pure and unadulterated foods, Heinz had to convince the public that it was different from less-scrupulous processors operating in the early days before there was any legal compulsion for purity.

BROADWAY'S FIRST "SPECTACULAR" was this six-story electric sign erected by H. J. Heinz at Times Square in 1900. The pickle and the "57" were then famous trademarks.



HORSELESS WAGON in 1899 began to replace Heinz black horses. Electric trucks, always finished in white, green and gold, were reputedly the first in Pittsburgh.





AND NOW



One of the favorite mottoes of H. J. Heinz—who had his offices plastered with them—was, “Quality is to a product what character is to a man—therefore, the first rule in our business is to make our products the best we know how, regardless of cost.”

Not only did H. J. and his son Howard work closely with Dr. Harvey Wiley some 40 years ago in the establishment of the Federal Pure Food Law—which finally put the entire processed-foods industry on its feet—but continuous chemical analysis and control of product have been maintained in the company since 1893. Today the Quality Control Department employs more than 100 persons and one of the objectives of a current \$15,000,000 plant-expansion program is a five-story, ultra-modern, stainless-steel-and-glass Research and Quality Control Center.

“Quality men” are constantly checking every operation in the production of a variety of items. In addition, each product is given extensive laboratory tests. When ketchup clicks off the packaging line at 2 o’clock, for example, several bottles are automatically put aside for testing. One sample is opened within the hour and tested at the factory, wherever it may be, against standards for consistency, color, smell and flavor. Another bottle is kept for 12 hrs., then opened and given a similar test. A third bottle is rushed to the central Quality Control Laboratory for detailed tests. A fourth bottle is carefully marked with date and place of processing and placed in storage; months, or even years, later, this bottle is opened and tested for keeping qualities and flavor. A similar routine is followed with all products.

Well aware of the powerful effect of color on sales appeal, Heinz has always maintained a particularly rich, red color in its ketchup. The method by which this color is obtained is a Heinz secret, but samples are taken regularly from each batch prior to packaging and checked against a spinning Munsell color wheel.

The elusive thing called flavor, too, is rigidly controlled, with a select group of home office employees gifted with that sixth sense called “organoleptic”—among them, Jack Heinz. One special group of tasters tries new products as they are developed. Another meets each Tuesday and Thursday for routine taste-testing of Heinz products from the production line.

Package development, testing and control is a function of the Quality Control Department. It might seem that cans and jars were pretty well standardized, but research at Heinz is constantly under way to find better containers and closures if possible—easier to handle in the plant and in the home, easier to pack, easier to transport. Detailed performance specifications and blueprints are written, too, for every single packaging item that Heinz buys, from corrugated cases to the smallest bottle cap, and every incoming shipment is checked against these standards.

Because Heinz has for years fabricated most of its own cans, the packaging laboratory has had occasion to work directly with tinplate and its coatings and, along with its steel suppliers, has done much of the original development work on interior can coatings widely used throughout the food industry today. Packing its baby foods in tin exclusively from

1931 to 1944, the Heinz company did much to dispel the popular notion that it was unsafe to store food in an opened can.

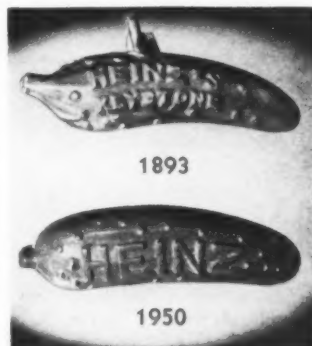
The Quality Control Laboratory is full of strange machines that chew up peas to test their tenderness, plunge iron darts into salad dressing to determine viscosity; record the strength of an average woman’s wrist action in removing a bottle top and measure how far ketchup will travel when poured on a sirloin steak.

For 81 years, Heinz has practiced the precept that a package is only as good as the quality it contains.

Advertising and promotion

H. J. Heinz was the first man to erect a “spectacular” electric sign on Broadway—a six-story mammoth put

PICKLE PINS, in original and latest version. Since H. J. Heinz first drew through to his 1893 Chicago World’s Fair booth by distributing the pin, over 50,000,000 have been handed out.





SOUP KITCHEN, shown in its latest model, was an important Heinz innovation. An instant hit with soda-fountain and restaurant proprietors, it gave Heinz entree into the institutional field, which now accounts for about one-fourth of sales.

up in 1900 at Times Square advertising the 57 Varieties with thousands of Mazda bulbs, at a time when even a single bulb was a curiosity. He was the first man to put a live demonstrator in a store window. But his biggest bit of showmanship was his distribution of pickle pins at the World's Columbian Exposition in Chicago in 1893.

Heinz, along with other food companies, had been tucked away on a balcony overlooking the main exhibition floor and the crowds—agag at the Midway and Little Egypt—were conspicuous by their absence. A pall of gloom settled over the food-product exhibitors.

But H. J. Heinz was never a man to be ignored. Soon visitors all over the grounds could be seen stooping to pick up bright little brass disks that appeared to be umbrella or baggage checks that someone had lost. On one side of each was stamped a notice that if the finder would bring the check to the Heinz exhibit on the balcony of the exhibition hall, he would receive a valuable souvenir.

Heinz, of course, had bought up thousands of baggage checks, had them inscribed and personally scat-

tered them around the exposition grounds. The souvenir, hastily thought up and procured—was the first pickle pin, a little plaster cucumber of an unnatural but rather pleasant green, embossed with the words "Heinz's Keystone." Soon the crowds were flocking to the food exhibitors' balcony in such crushing numbers that workmen had to be called in to shore up the floor—and almost every man, woman and child went away from the fair a walking advertisement for Heinz products.

Heinz, with his great flair for showmanship and his innate knowledge of human psychology, had saved the day. His fellow exhibitors were so grateful that they gave him a testimonial banquet and presented him with a gold medal signifying that he had made the greatest contribution of the year to the food industry.

The pickle pin—which has had hundreds of re-incarnations and is today made of plastics and still handed out to every visitor to the Heinz plant—certainly qualifies as one of the most famous give-aways in all merchandising history. Jack Heinz estimates the total distributed in (appropriately) 57 years at more than 50,000,000, but that figure seems very conservative. The famous Heinz 57 Pier at Atlantic City—another piece of H. J.'s showmanship dating from 1899—was alone visited by 50,000,000 persons before it was destroyed by the 1944 hurricane and practically nobody got out without a pin. At the pier they also received free samples of Heinz products, free classical concerts, cooking lessons (naturally involving the use of many Heinz products) and traveling museum exhibits.

As part of his highly successful effort to convince consumers of the purity of his canned products, Heinz was the first man in the food industry to open up his plant to visitors. A trip through Heinz's became the thing for all visitors to do on any trip to Pittsburgh.

Several millions have made the tour and today they are escorted by attractively uniformed girl guides after an indoctrination that includes cooking demonstrations, *hors d'oeuvres*, movies—and a Heinz souvenir pickle pin.

The plant, of course, is immaculate and every worker has a spotless white or blue uniform and distinctive Heinz cap. One of the things that impresses visitors most is the room where pro-

fessional manicurists give free manicures regularly to all employees who handle food.

The founding Heinz was the kind of man who got favorable publicity from almost everything he did. Before the advent of the motor truck, Heinz products were delivered to grocers by horse and wagon—but not just ordinary horses and wagons. The wagons were jewel pieces of white and green enamel and gilt, embellished with reproductions of some of the dozens of gold medals won by Heinz products, and each drawn by gleaming black show horses, his love of horses dating from the first bottles of horseradish that he delivered in his father's buggy. H. J. was a collector of coal-black horses and personally purchased and inspected each one.

Although the passing of the horse must have caused him personal regret, he was quick to see the publicity possibilities in horseless wagons and he had the first electric trucks and the first gasoline trucks to be operated in Pittsburgh.

Today, the hundreds of delivery trucks and highway vans in Heinz' nation-wide fleet still follow the original color scheme.

Another of the early promotions

NEW TREND in Heinz labeling may be indicated by this label for a new Canadian product which includes a small, full-color vignette of product. Realizing the value of its keystone trademark as the dominant label element, Heinz has been almost the single exception among food canners in omitting vignettes.



MODERN PACKAGING

of Heinz 57 was the construction in 1914 on two dozen of the country's prominently located hillsides of gigantic concrete 57s. Superimposed on the natural green background and whitewashed twice yearly, the 57s, some occupying 30,000 sq. ft., were visible for miles in the traditional Heinz green-and-white colors. The hillsides were in such choice locations as the Horseshoe Curve along the Pennsylvania Railroad at Altoona, Pa., and the side of a cliff overlooking San Francisco Bay.

During World War II—just to illustrate the fame of the trademark—the Heinz 57 adorned shirts and blouses of personnel in a bombardment squadron of the 446th AAF Bombardment Group. In this squadron were two competitive factions, known, jokingly, as the 28th and 29th Air Forces. The two factions joined forces and, adding the 28 and 29, arrived at 57. Their insignia was designed with a figure 57 superimposed on a keystone and a winged pickle with a background of "pickle green."

In Pittsburgh the number 57 is held in such sacred regard that the telephone number of the H. J. Heinz Co. is 1-5700 and the post office box address is 57. In addition to the huge lighted "57" sign towering over the acres of factory buildings, the name Heinz appears at least 12 times on the river side of the red-brick buildings in white letters standing 6 ft. high.

But certainly not all of Heinz promotion activities have been in unorthodox channels. The company has been one of the largest and most consistent advertisers of all food-processing companies for many years, using newspapers, mass-circulation magazines and billboards. In the latest fiscal year for which figures are available, it was estimated that Heinz advertising had a circulation of 58,637,775 readers per month in magazines, 83,940,582 readers per day in newspapers and a little more than 33,000,000 readers per day in outdoor advertising.

That is what is known as blanket coverage.

Sales and merchandising

The Heinz company is one of the few large food manufacturers selling directly to the grocer. There are no jobbers or middlemen. On an average of once every two weeks, one of the 1,500 Heinz salesmen visits each

of the approximately 200,000 grocers in the U. S. and Canada. In every major city the company has a warehouse completely stocked and a fleet of trucks to serve the needs of customers in that area.

Not only do these company-employed salesmen sell the 57 Varieties; they assist grocers in arranging displays, work up advertising tie-ins and plan special promotions. They sample new products to customers, carrying Thermos bottles in their sample cases so they may offer hot samples. Heinz salesmen have always believed that tasting is an invaluable selling aid—from the early days when they maintained jars of pickles and condiments and a tray of sampling dishes in each retail store, calling each morning to wash and refill the jars and trays.

Whenever a slump in general business conditions threatened a decline in sales, the Heinz selling organization has been ready with a new merchandising idea.

The strained foods for infants and children were introduced in 1931 and helped to pioneer this whole vast new field. But the idea that buoyed up the company throughout the depression '30s must be credited to Howard Heinz, who introduced a complete line of 21 soups at the depth of the depression.

A prize Heinz idea was a plug-in electric soup kitchen for the back counter of soda fountains and lunch rooms, so that hot, dependable soups could be served quickly without the attendant having to leave the counter to go into the back room to light the fire under the "soup pot." The open display of Heinz canned soups that resulted not only boomed their sale, but it provided the entree the company had been seeking into the restaurant and institutional trade. Today the Hotel & Restaurant Dept. of the Heinz Sales and Distribution Division caters to some 100,000 hotels, restaurants and hospitals, and a sizable portion of Heinz' pack of such products as baked beans, spaghetti, macaroni and chili con carne is put up in No. 10 cans for this market.

If there is any regret in the Heinz sales department over the loss, in these institutional sales, of brand recognition so painstakingly built up over the years, it does not show. There is solid satisfaction over such stories as that of the Cape Cod roadside lunch-room proprietor who became famous



PACKAGE RESEARCH includes such features as making sure that jar caps are applied with just sufficient torque to seal, yet be easy for women to remove.

for his home-made clam chowders; his only complaint, as voiced to Heinz salesmen, was that he had to row secretly out into the Atlantic each night and sink the empty Heinz cans from which his "home-made" chowder came.

But the Heinz organization never forgets that its principal customer is the American housewife. "She has kept us in business for 80 years," says Jack Heinz, "because we have rendered her a service. If the American housewife can do for herself, or find others to perform better the functions which we perform in her behalf, we will have no business. And we never forget it."

CREDITS: Labels, Nevins Church Press, Bloomfield, N. J.; Fuller Label & Box Co., Pittsburgh, Pa. Glass, Owens-Illinois Glass Co., Wheeling, W. Va.; Anchor Hocking Glass Co., Lancaster, Ohio. Tygart Valley Glass Co., Washington, Pa.; Brockway Glass Co., Brockway, Pa.; Armstrong Cork Co., Lancaster, Pa., and Thatcher Glass Mfg. Co., Elmira, N. Y. Caps, White Cap Co., Chicago, Ill.; Anchor Hocking Glass Co., Lancaster, Ohio; Aluminum Co. of America, Pittsburgh, Pa.; Armstrong Cork Co., Lancaster, Pa.; Crown Cork & Seal Co., Baltimore, Md.



DESIGN

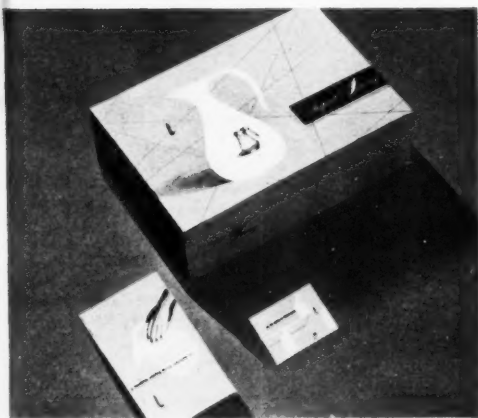


Insecticides in flower pots

Eye appeal and utility are combined in these new dispensing and re-use flower-pot containers for garden insecticides marketed by Michigan Chemical Corp., St. Louis, Mo., and called the Pestmaster Gardenier. The containers are molded of polystyrene in two pieces—flower pot and separate lid—to form a sealed package. Punch-out perforations in the bottom of these flower pots permit easy use as a shaker when insecticide is needed in the garden. When the pot is empty, the lid is removed, flowers planted in the pot and the lid used as the flower-pot base. The containers come in six different colors. All six are displayed in a tiered, paperboard display stand at the point of sale. The containers on the upper tier are recessed into die-cut openings, above which are full-color printed flowers which seem to be growing out of the pots.

CREDITS: Flower-pot containers molded by Associated Plastics Corp., Midland, Mich., using Dow Chemical Co.'s Styron polystyrene. Display, Dosie & Johnson Co., Milwaukee, Wis. Paper labels, The McKay Press, Midland, Mich.

Two-dimensional projection of a selling point



Dispensers, Inc., of Los Angeles and Chicago, one of the leading manufacturers of metal slide-top glass containers, are marketing a new gift line of their products under the trade name, "Dripout Savoy," and have used package design as an important merchandising feature. Since the products are in the medium-price field, it was believed that an expensive-looking package would add gift appeal. A reproduction of the Dripout pitcher became the focal point of the entire design, giving immediate product identity. The simple, modern, over-all design does a strong visual selling job. Two-color printed in green and black, a four-color effect is achieved by use of white areas and gray screened from the black. The same color scheme and design are used for promotional material.

CREDITS: Design, Jerome Gould Associates, Los Angeles. Set-up box, Advance Paper Box Co., Los Angeles.

HISTORIES

Lamp-post squeeze bottle

Striking showmanship is revealed in this novelty squeeze bottle molded of polyethylene plastic in the shape of a lamp post for "Light of My Heart" cologne, introduced by Eugene, Inc., New York. Designed for retail sale within the popular price range, it is distributed primarily through variety and drug stores.

Firmly imbedded in a wooden base, the private-mold, lamp-post bottle stands 8 in. high and is topped by a polyethylene cap. Company and trade-name identity are clearly visible on the "street" sign projecting from the side of the bottle. Both the bottle and the street sign are of translucent polyethylene and the squeezable lamp-shaped bottle is stippled. Letters in the sign are etched in gold, set off by finely-drawn red scrolls. The wood base and the force-fit cap come in various colors.

Introduced initially for the Christmas season, the item is now being strongly promoted as a Valentine Day gift item and for year-around sale.

CREDIT: "Plaxpak" bottle and cap, Plax Corp., Hartford, Conn.



Window carton with attached liner for frozen fish

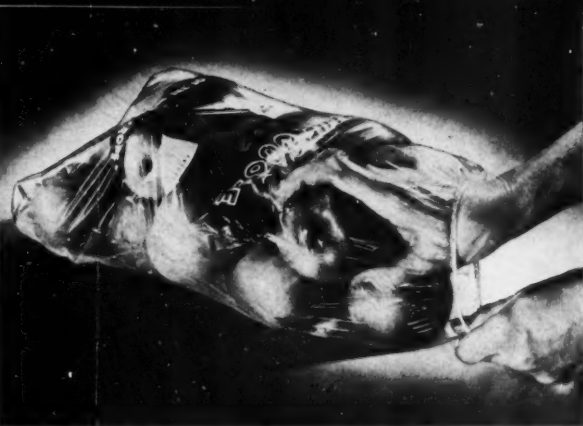
"Fres-shore" brand frozen seafoods are being merchandised by The Kroger Co. in this newly designed one-piece telescoping carton with locking cover. Made from solid bleached laminated frozen food carton board, the container has an attached inner liner of moistureproof cellophane. There is a small window cut-out in the carton board so that the customer may have a view of what she is buying. The carton, which holds 1 lb. of frozen seafood, measures $1\frac{1}{8}$ by $8\frac{1}{2}$ by 3 in. Among the advantages claimed for the carton are its excellent protective qualities and the ease and speed with which it can be set up for filling. The cellophane overwrap is full-color printed with an appetizing, ready-to-eat dish of fish. The company slogan is printed on the transparent window.

CREDITS: Carton, Marathon Corp., Menasha, Wis. Overwrap, Milprint, Inc., Milwaukee, Wis.





INGENIOUS SELF-CLOSURE of the tough, transparent Pliofilm bag is simply a strip of elastic binding stitched to the gathered material at the top. The small opening permits ventilation, but will not expand enough to let any of the apples enclosed escape.



REPLACING a bruised apple without damaging the bag is an important convenience feature for the retailer or wholesaler. He simply reaches through the elastic-bound top opening of the bag, removes the bruised apple, replaces it with a good one. Each apple is almost completely visible in bag.

Snap-top bag ELASTIC CLOSURE FOR FRUIT PRE-PACKS IN FILM

OFFERS ADVANTAGES IN USE—AND APPEAL FOR HOUSEWIFE'S RE-USE

One of the big packaging trends of 1949 was the swing to Pliofilm bags for the pre-packaging of apples, oranges and other "hardware" produce in carry-home quantities of 3 lbs. or more.* By the end of the year, thousands of pounds of the tough, rubber-based plastic film were being converted into bags of several types, each of which has many demonstrated advantages.

Now, after a full season's experience, American Fruit Growers, Inc.—one of the largest nationwide shippers of apples and citrus fruits, under the Blue Goose brand—is ready to report on one new type that has the unique property of a circular elastic top opening, making it instantly openable and reclosable without tying, stapling or other mechanical operation.

In the view of American Fruit Growers, which has used several million of the bags for Eastern and Western apples, California and Florida citrus fruit, the snap-top bag has several advantages:

It provides the necessary venting of CO₂ from fruit through the 2-in. opening that remains at the top when the

bag is closed, retards spoilage and at the same time retains a desirable amount of moisture.

It gives the wholesaler and retailer the great advantage of being able to reach in and replace an apple or orange that shows signs of going bad, before it can affect its neighbors.

The elastic top, so similar to that of the bowl covers and refrigerator bags that she has been accustomed to using, gives instant suggestion to the housewife of the re-use possibilities, which is one of the big selling points of this type of bag.

The bag is readily and quickly handled on conventional weighing-filling machinery now in use in the fruit industry and, of course, eliminates the final operation of closing.

First used last season by the Appalachian Division of American Fruit Growers to pre-package Eastern apples, the snap-top bag demonstrated its selling appeal to consumers, dealers and growers in definite dollars-and-cents results, according to the company.

To the growers, in addition to the advantages cited above, its use showed that they could offer apples freshly pre-packaged just prior to shipment in bags that kept the apples in good con-

dition throughout their journey from the packing line at the apple-storage center to the consumer at a cost little more than that of packing the apples for bulk sale. So far as labor is concerned, a preliminary breakdown of cost figures taken during early trial runs of grading and packing lines when they appeared to be running normally, indicated that the labor cost of packing eight 5-lb. snap-top bags (40 lb.) was 14.3% less than the cost of packing one bushel basket and 28% less than the labor cost of packing 1 1/2 bu. Eastern boxes. Total packaging cost per bag was estimated by the division to be 0.13885 cents.

To the retailer and wholesaler, the convenience of the snap-top also meant less chance of damage to the bag itself when fruit had to be replaced and they were impressed by the fact that medium-sized apples, which usually meet with considerable sales resistance when displayed in bulk, were completely acceptable when offered in the bags even at premium prices. Most of the large food chains such as Kroger, A & P and Colonial Stores offered the pre-packaged Blue Goose apples at no additional cost but, the company reports, smaller stores who put a 1- or 2-cent premium price on the pre-packed

* See "Five Pounds in Film," MODERN PACKAGING, April, 1949, p. 162; "Film-Bagged Apples," Dec., 1949, p. 80; Design Histories, Jan., 1950, p. 96.



ATTRACTIVE appearance and re-use possibilities add to consumer acceptance of bag. This 3-lb. bag for oranges is three-color printed by rotogravure.

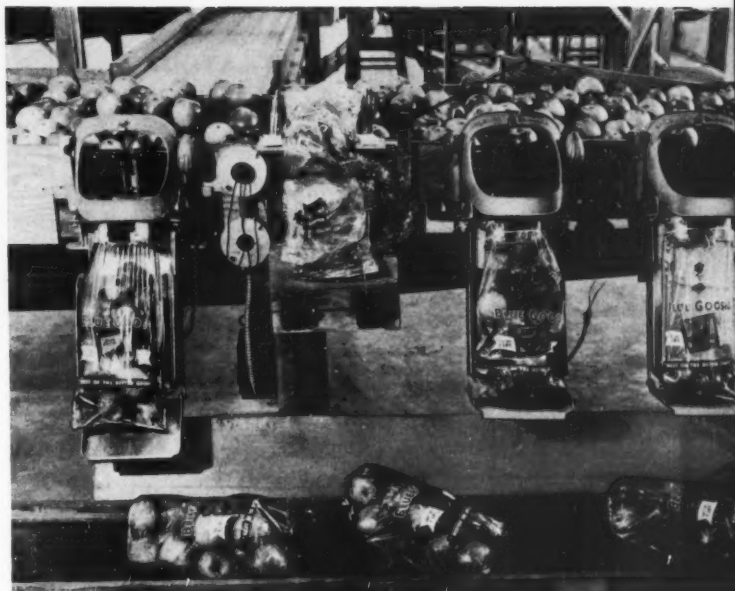
apples found them outselling bulk stocks of the same size and varieties. This value-for-price factor obviously appealed to consumers as much as the convenience of the snap-top bag which permitted them to see each piece of fruit.

It was the ingeniously simple self-closing feature of the bag that appealed most to American Fruit Growers. The Pliofilm bag is a conventional square, side-gusset, bottom-seal type. At the top the film is gathered and stitched to a small strip of elastic binding; the ends of the binding are stitched together so that, when finished, the top contracts, leaving a small, round hole as the opening that is approximately 2 in. in diameter. Although this elastic-bound opening is too small when closed to allow an apple to fall out even when the filled bag is held upside down, it expands enough so that the top may be slipped around a bagging head on a mechanical weigher, which makes it easy to fill the bag.

Credit for the original idea of the snap top goes to Frank Belmont of Granada Packing House, Anaheim, Calif., who has a patent pending on the invention and has licensed one of the nation's largest film converters to manufacture the bags.

Appearance factors

While the distinctive snap-top opening of the bag made it American Fruit Growers' choice as a pre-package, the glossy transparency of the bags, the attractive appearance of the apples as complemented by the brilliant inks



AUTOMATIC BAGGING HEADS at the Winchester, Va., apple center were adapted especially for the snap-top bags. Each is capable of filling as many as 350 bags per hour. Complete filling cycle is controlled by microswitches, set to operate in sequence, in balance-scale mechanism.

used in printing the design on the front and back, and the great tensile strength and protective qualities of the film were other features considered as they affected sales and handling in distribution.

The apples are packed in the bags in 3-lb. as well as 5-lb. weights, while oranges are packaged in 5- and 8-lb. perforated Pliofilm bags, the perforations allowing the greater ventilation required for oranges. In addition, American Fruit Growers are now pre-packing potatoes and onions in 5- and 10-lb. weights in snap-top bags fabricated of polyethylene, this film being considered more suitable for these products. The potato bags are perforated also.

The bags are printed in three colors by rotogravure, with the blue-and-orange Blue Goose trademark prominently displayed on the front panel. Lettering and illustrations of the different ways the bags may be re-used in the home are printed on the back panel in blue and white. It is interesting to note that the bags have no product identification printed on them. None is needed, since the contents are clearly visible, and this permits the



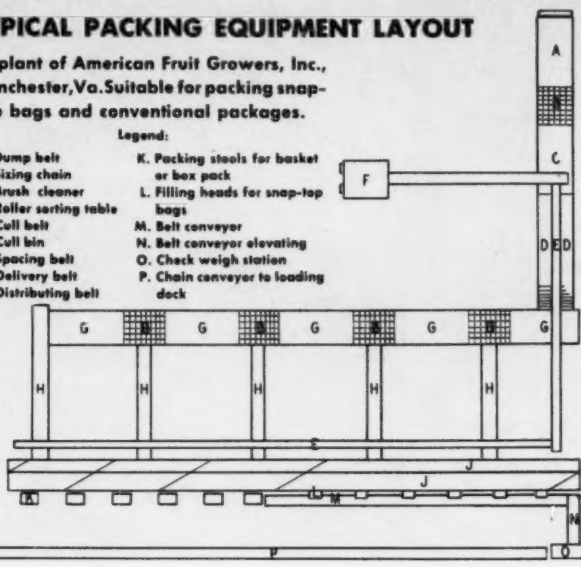
HAND-OPERATED filling heads, designed by division's engineers for the Winchester plant, are slower. Simpler one (right) requires the packer to feed the apples by hand. Accumulated apples in the head shown at the left flow into the bag when operator pulls lever depressing the retaining gate in front of the mouth.

TYPICAL PACKING EQUIPMENT LAYOUT

at plant of American Fruit Growers, Inc.,
Winchester, Va. Suitable for packing snap-
top bags and conventional packages.

Legend:

- | | |
|-------------------------|--|
| A. Dump belt | K. Packing stools for basket or box pack |
| B. Sizing chain | L. Filling heads for snap-top bags |
| C. Brush cleaner | M. Belt conveyor |
| D. Roller sorting table | N. Belt conveyor elevating |
| E. Cull belt | O. Check weigh station |
| F. Cull bin | P. Chain conveyor to loading dock |
| G. Spacing belt | |
| H. Delivery belt | |
| J. Distributing belt | |



company to stock identical bags for different products; orders are placed merely by sizes.

The Eastern apple growers in New York State and the Shenandoah-Cumberland valley region of Pennsylvania, Maryland, West Virginia and Virginia, who marketed their 1949 apple crop through the Appalachian Division are justifiably proud of the sales success achieved by the new snap-top bag. The division used the bags only for medium-sized apples ($2\frac{1}{4}$ to $2\frac{3}{4}$ in. diameter) of six Eastern varieties—Jonathan, Delicious, Stayman, Winesap, McIntosh and Rome Beauties. Its decision to use the bags for these medium-sized apples rested on three factors: (1) this size settled best in the bags, receiving less side bruising than larger sizes; (2) the count was good in relation to the weight—from 16 to 22 apples per 5-lb. bag; (3) it was believed that the bags would do much to overcome the sales resistance to this size, which it did. In less than three months more than 4,000,000 lbs. of the pre-packed apples moved out of division's three apple-storage and packing centers in Burt and Morton, N. Y., and Winchester, Va.

The results have been "phenomenal," according to G. S. L. Carpenter, division manager. His verdict is backed up by similar reports from the

West Coast, where American Fruit Growers and other shippers used 2,500,000 of the bags for Western apples.

Packaging lines

Each of the apple-storage centers in the Appalachian Division was equipped to bag the apples on a regular packaging line. The accompanying floor plan shows the arrangement of the grading and packaging lines of the new Winchester, Va., plant where three types of bag-filling heads are used. Daily capacity there is 15,000 bags.

As soon as the snap-top bag was developed, a special balance-scale type of filling head, operating with solenoids similar to the type used to fill mesh bags, was designed to handle it. Three of these heads were installed at the Winchester plant at one end of the packing-table conveyor. The graded apples feed into the filling heads from the supply belt, passing over a split gate at the entrance of the head. The two sections of this split gate, the special collar and ring device that holds the expanded bag top to the filling mouth (this device serves as one side of the scale) and the bag rest at the bottom of the guide chute on the head all are controlled by the micro-switches, set to operate in sequence.

Once the empty bag is positioned over the collar and ring and the control button of the filler is pushed by the operator, the split-gate sections drop down, allowing the fruit to start rolling into the bag. As the apples slide into the bag, their weight is automatically measured and, when it reaches a predetermined amount, one half of the split gate is released to slow down the flow of apples. When the full weight is reached, as "felt" by the collar and ring device, the other gate closes and three seconds later the bag rest drops down, allowing the filled bag to slip off the filling head onto a conveyor belt.

An experienced operator, supervising these filling heads, can attain a speed of 350 bags per hr. per filler without difficulty, according to company officials, who say that only one snag has been encountered with these heads—often one or two apples get caught between the top of the bag and the split gates after they close; their weight is registered, but they do not actually get into the bag. When the bag is released these apples drop to the floor and are wasted. Since the weight, therefore, is not always accurate, each bag has to be check weighed.

Various modifications in the design of this head are being studied to overcome this particular problem, it is understood.

Two other filling heads, designed by



POLYETHYLENE BAG, used similarly as pre-pack for 5- and 10-lb. weights of potatoes and onions. Potato bag (above) is perforated, like Pliofilm orange bag, for greater ventilation.

the division's equipment engineer, overcome the spilling handicap, but are not as fast as the completely automatic heads. Like the automatic bagging heads, these fillers have collar-like attachments at the mouth onto which the elastic top can be snapped. The first was simply a wide-topped, shallow funnel with a bag rest under the mouth which was attached to the side of the conveyor table, level with the supply belt. The bags are snapped over the mouth by hand and the packer picks the apples off the supply belt and feeds them by hand into the funnel. The approximate weight of the bag can be determined by the operator's experience with the particular variety. Filled bags from this head are put on the same belt conveyor as the others to be check weighed, at which time any additional apples needed are put in.

Another type of filling head is operated semi-automatically and from 250 to 270 bags an hour can be filled with it. The apples feed into a slightly tilted trough which is designed so that it holds approximately the right number of apples by volume. The mouth is located at the outer side of the trough and is protected by the rim of

the trough; it has a metal collar on the underside, onto which the bag top slips, and a bag rest below the mouth. Just in front of the mouth there is a small retaining gate which holds the apples back when a bag is being snapped on the collar. The operator depresses the gate by tripping a small lever on the side, permitting the apples to roll gently into the bag in a continuous body. As soon as the lever is released, the retaining gate jumps back up again, stopping the flow of apples into the mouth, and the operator has sufficient time to remove the bag and put on another one while the trough is filling.

After being check weighed, the pre-packaged apples are packed in a master shipping container made of corrugated board that holds eight 5-lb. bags, the equivalent of one bushel basket or 1 1/8 bu. Eastern boxes.

Below is a comparative-cost table, based on preliminary cost figures compiled during trial runs of the bagging heads. These figures include the complete package (in the case of the bushel basket it is the basket, cover, liner, cushion and decorative shredded paper on the face of the package and labels; for the master container of the

bagged apples it includes the cost of the eight snap-top bags, the corrugated container and labels), labor and overhead expenses.

Comparative cost of packing 40 lbs. of apples in various containers

	Dollars
Bushel basket—export tub	\$0.75
Eastern 1 1/8 bu., panel end box faced and filled	0.8113
Tray-Pak in wirebound crates	0.8622
Snap-top bags, eight 5-lb. bags in 300-test corrugated master container	1.11 or 0.13885 per bag

It is pointed out that the dealer may lose, through damage and waste in the repeated handling of loose apples, the apparent saving from buying bulk.

Other packers using this type of bag include the Granada Packing House (oranges) and Cowiche Growers, Inc., whose Hy-Land-Kids brand of Washington State apples are being pre-packed in the bags.

CREDITS: "Snap-Sack" bags, Shellmar Products Corp., Mt. Vernon, Ohio. Automatic filling heads (special adaption of the Ahlberg filler), Food Machinery & Chemical Corp., San Jose, Calif.

Carry-home cartons for king-sized apples

These convenient cartons with a carrying handle as an integral part of the package, similar to those used for soft drinks, have been designed for Washington State "king-sized" apples that weigh from eight to 12 ounces each. Holding six apples—each one nested stem up in a separate cell to reduce bruising—the carriers average between 3 1/2 and 4 lbs. of fruit.

To show off the vivid color of the fruit, the inside die-cut walls and side panels are printed a deep purple. Price and net-weight spots are put near the die-cut finger holds in the center of the handle where they can be seen when the packages are displayed. When the containers are stacked in pyramids, the handle can be left folded over as it is when the carriers are stacked in the shipping carton. Twelve of the filled carriers are packed two

by two and three high for shipping in a double-reinforced, corrugated, master container.

The new container is reported to cost about the same or little more than the standard wooden box.

Delivered to the packer in collapsed form, the carriers can be set up for filling by hand.

CREDIT: Carton, Standard Paper Box Corp., Los Angeles, Calif.



Visibly yellow

NEW CELLOPHANE PACKAGE INTRODUCED
BY SWIFT & CO. FOR FOUR PARCHMENT-
WRAPPED QUARTERS SHOWS AT A GLANCE
IT CONTAINS PRECOLORED MARGARINE



PHOTOS COURTESY SWIFT & CO.

"SEE the golden quarters!" says Swift advertising introducing this new package. Each 1/4-lb. print is wrapped, butter style, in translucent parchment and the four prints are overwrapped and heat sealed in a single sheet of printed 450 cellophane.

QUARTER WRAP is printed around center, where it will not interfere with the visibility of product. Center panel of cellophane overwrap has yellow background with white border; other printing is blue and red.

Visibility packaging of yellow margarine in printed cellophane wrappers is the latest merchandising idea to hit the margarine field, which has been extremely active in finding new and better ways to package the pre-colored product. With sale of colored margarine now permitted in 32 states and with strong indications that the punitive 10-cent Federal tax on the product may be repealed at the present session of Congress, the volume potential for the new package and for yellow margarine in general looks highly favorable.

Swift & Co., Chicago, producer of Allsweet margarine, is the first organization to distribute transparent-wrapped yellow margarine nationally. Swift's experience with the package, beginning several months ago in the Atlanta, Ga., sales territory, brought such encouraging results that the company is now wrapping margarine in this manner for those states which have

legalized sale of the colored product. California (Oct. 1) and Ohio (Dec. 9) were the most recent states to take this step. A bill has been proposed in New York State.

It is too early to speculate as to whether the transparent wrap, or any of the other special packages brought out recently, may become standard for yellow margarine. But in view of the favorable economics of this type of package, its unmistakable identification of the product as yellow colored, its obvious self-service appeal and the steadily mounting volume of colored margarine being produced, Swift's new Allsweet package merits serious study as a complete departure from previous practice for this basic food product.

The new Swift package consists of four parchment-wrapped, 1/4-lb. prints of yellow margarine in conventional butter style, but laid side by side and tightly overwrapped with heat-sealing printed cellophane. The wrapper, at-

tractively printed in bright yellow, blue and red, is so designed that the labeled portion encircles the package like a band, leaving both ends of the four prints plainly visible through the transparent surface. Printed product identification on the parchment wraps is kept toward the center of each unit so it does not obscure the buyer's view of the colored quarters in the package.

Even a casual glance at the new package shows the housewife that the product is already colored and quartered—thus automatically eliminating from her consideration two of the greatest drawbacks that margarine has had in the past. Tests by Swift & Co. strongly indicate that the transparent package, making it possible to see the quarter-pound prints themselves, stirs a much greater buying impulse than an opaque package on which it is plainly stated that the product within is both colored and quartered.

One of Swift's basic reasons for in-

Introducing this package was to overcome a sales problem reported by some retailers. Instances were cited in which consumers had thought they were buying yellow margarine, but—due to the fact that the packages of colored and uncolored margarine were basically similar and the identifying legend was not easily read—found themselves with the wrong package when they got home.

In its original form, the new package utilized a "two on two" arrangement of the quarter-pound prints, giving the final unit a square cross-section. Although in preliminary store sales tests this package also showed ability to outpull the regular carton, the package did not prove completely satisfactory. Further research by Swift indicated that the single-layer arrangement of the four wrapped quarters provided a package with more effective label area and sales appeal.

The design of the new package label, as worked out largely by the Swift advertising-art department, follows the same basic treatment as that of the carton used earlier. However, the more ample areas of the flat-style package permit a much cleaner, less cluttered appearance. The new design highlights the Allsweet name in blue letters against the yellow background, with the familiar Swift oval

trademark and other label elements in red, except for the blue triangles forming the corners. A "Swift Quality Food" seal in blue, with red ribbon, also appears on the package. Another new label element is the phrase, "delicate, natural flavor," which has been used for many years in Allsweet advertising, but never on the package.

Experience to date indicates that the wrap stands up well under normal distribution conditions, including summer temperatures in the South. Since there is no grease absorption by the cellophane overwrap, the package remains unstained and does not tend to pick up soil. With each of the prints individually wrapped and the cellophane overwrap heat sealed at the seams, the product has "no place to go." In tests, the package stood the weight of a man without breaking.

Keeping qualities are enhanced by the fact that the outer cellophane wrap, with its heat-sealed seams, is practically airtight. Data compiled to date on the new package indicate that it is superior to the carton in this respect, according to Swift officials. The wrap is particularly convenient for storing unused quarters of Allsweet in the home refrigerator, since the edge may be folded back after opening.

Swift's new Allsweet package is handled on automatic types of equip-

ment. Emerging from the print-forming and wrapping unit, the parchment-wrapped, 1/4-lb. prints move by conveyor direct to the wrapping machine, where they are overwrapped in groups of four. Since no backboard is used, the package has equal visibility from both sides. Fed from a continuous roll, the wrap is accurately registered on the package by means of an electric-eye control. As the packages move from the wrapping machine by conveyor, they are packed in 24-lb. corrugated shipping cases.

To introduce the new package, Swift is using extensive advertising coverage in both national and local media. This advertising, together with strong sales support and the immediate identification features of the package, should prove to be highly successful.

Because still-existing laws force a higher price for the precolored margarine and completely bar it in some states, Swift is continuing to produce the uncolored Allsweet in three package forms—regular carton, flat-style carton and flat carton with the squeeze-color vinyl-nitrile bag, which Swift calls "Jiffy-Color Bag."

CREDITS: Printed parchment wraps for 1/4-lb. prints of Allsweet, Kalamazoo Vegetable Parchment Co., Kalamazoo, Mich. Printed cellophane overwrap, Traver Corp., Chicago. Print-forming and wrapping machine, Lynch Corp., Package Machine Division, Toledo, Ohio. Wrapping machine for consumer-package overwrap, Hayssen Mfg. Co., Sheboygan, Wis.

AT PLANT, the yellow quarters emerge from the print-making and wrapping machine shown in the background, move on lower level of the conveyor into the overwrapping machine at left and emerge again on the upper level to be packed in shipping cases, 24-lb. packages to a case.



SHIPPING CASE is given merchandising effectiveness and is unmistakably distinguished from case for uncolored product by printing with brilliant yellow all-over background. Copy is printed in dark blue and red.



MODERN PACKAGING PAGEANT

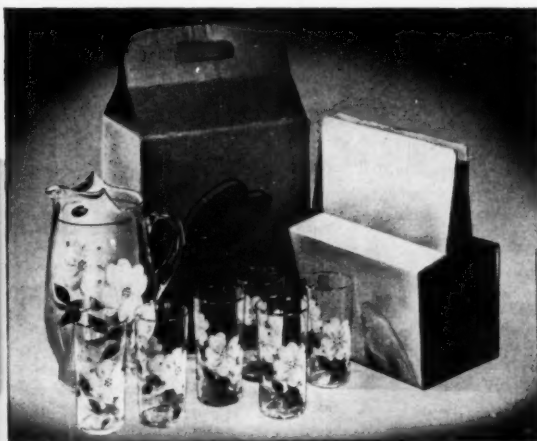


1 Functional and merchandising qualities are combined in this carry-home carton for handmade glassware sold by Dunbar Glass Corp., Dunbar, W. Va. Bottoms of the corrugated cartons are interlocking. No tape is used and one side is stapled. Extended side flaps tucked inside provide vertical partitions. A one-piece liner forms a horizontal shelf midway in the carton for the tumblers to rest on, as well as a vertical partition separating the two rows of tumblers. When the extended side flaps are tucked in, each tumbler is housed in its own cell. The carrying handle, held flat by cellulose tape, pops up when tape is removed. Carton, Hinde & Dauch Paper Co., Sandusky, Ohio.

2 The package design for Packer's Charm deodorant soap—newest product to be brought out by Packer's Tar Soap, Inc., Mystic, Conn., 80-year-old toiletries firm—employs a strikingly simple yet attention-getting motif. A peach-colored background proves effective for the camellia-like flower with its green leaves. The product, which has been in research for more than a year, will be featured in national advertising in a number of magazines in March, supported by all-out promotional efforts of drug and department stores throughout the country. Wrap, William W. Fitzhugh, Inc., Brooklyn, N. Y.

3 The sparkling emerald green quart bottles for Lady Betty prune juice, produced by Shedd-Bartush Foods, Inc., Detroit, display the product with utmost appetite appeal. Housewives should have no hesitancy in placing this easy-to-pour, non-drip container right on the table. The cap is applied in straight-line operation by a steam vacuum-packing machine operating at speeds up to 200 per minute. The upper section of the oval-shaped label carries the identifying Lady Betty silhouette trademark. Bottle, Anchorvac 27N closure and Steriseal capping machine, Anchor Hocking Glass Corp., Lancaster, Ohio. Label, The Fuller Label & Box Co., Pittsburgh, Pa.

4 Mother's Old-Fashioned Condensed Barley and Mushroom Soup, product of Mother's Food Products, Inc., Newark, N. J., is said to be the first condensed soup to be packaged in a vacuum-packed glass jar. Visibility gives the package self-selling impetus. Unused contents may be left in the jar and the cap easily replaced for refrigerator storage. Other products of the company, including pickled beets and several fish products, are being packaged in the same manner. Jar, Anchorvac N cap and Steriseal capping machine, Anchor Glass Corp., Lancaster, Ohio. Label, Ross Printing Co., New York.



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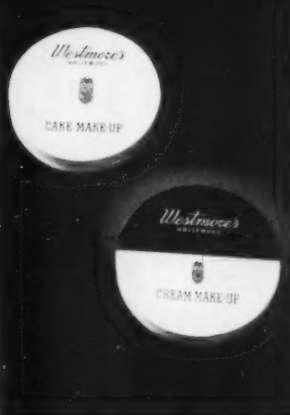


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5 Shulton, Inc., New York, selects a polyethylene squeeze bottle as the package for its new liquid shampoo—a product particularly adapted to this type of container since it is light in weight and can be dropped without breaking. The private-mold bottle, topped by a specially constructed, deep-seated polyethylene closure, is stippled, with lettering molded in. A purple colored aluminum foil collar is used for informational copy. An intensive promotional campaign, including advertisements in national women's magazines and in local major-market newspapers, is under way to promote the new product. Bottle and cap, Plax Corp., Hartford, Conn. Collar, Cameo Die & Label Co., New York.

6 Duplex bags made of moistureproof cellophane, used by Cudahy Packing Co. as protective packages for their jellied souse, are said to prevent the product from dehydration, loss of weight and formation of mold and slime, as well as to facilitate speed in packaging. The outside liner is reverse printed and the side paneling of the bag adds to its display value. Bag made by Milprint, Inc., Milwaukee, Wis., of Du Pont cellophane.

7 New containers for Cream Make-up and Cake Make-Up, introduced by The House of Westmore, Hollywood, Calif., for sale in variety and syndicate stores, are smartly designed with the Westmore crest. The opal glass base is topped by a metal cap which is off-set lithographed in rich burgundy and aqua colors. Design, Richard M. Krause, Inc., New York. Jars and caps, Hazel-Atlas Glass Co., Wheeling, W. Va.

8 That "down-on-the-farm" flavor and goodness in apple pies is well expressed in the vignette on the new label for cans of apple-pie filling marketed by Comstock Canning Corp., Newark, N. J. The design was aimed to appeal primarily to men's appetites via the housewife. Specially tested recipes prepared by a consultant in home economics and appearing on the back of the label are an aid to housewives. Lithography, The Stecher-Traung Lithograph Corp., Rochester, N. Y. Can, Continental Can Co., New York.

9 In introducing its new Auto-Splice film splicer, Mansfield Industries, Inc., Chicago, has adopted a colorful set-up box whose basic motif is a flying ribbon across the top simulating a strip of movie film. Splicing action of the device is suggested by the slit in the ribbon. Also featured is the newly designed trademark in third-dimensional effect. A continuous design is obtained by placing the packages either end to end or side by side at point of sale. Design, Richard M. Franz, Milwaukee, Wis. Box, H. S. McCracken Box & Label Co., Chicago.

10 The manner in which these new "Spoon Lift" tea bags, patented and produced by Servit Food Corp., New York, are used is illustrated in a circular spot on each panel of the folding carton in which they are packaged. The packet, formed of two facing sheets of filter paper sealed together, has a separate strip of the paper attached to one side through which the spoon is slipped to place the tea bag into the cup. Cartons, Berles Carton Co., Inc., Paterson, N. J., and National Printing & Folding Box Co., Brooklyn, N. Y.

MODERN PACKAGING PAGEANT



11



12

11 One of the latest products to be packaged in an aluminum tray pack is Winterhill Stuffing, a prepared, frozen, ready-to-use dressing for poultry, meats, etc., marketed by Winterhill Foods, Inc., Tuckahoe, N. Y. The package, which holds enough stuffing for a 6-lb. bird, is easily stored in market frozen-food cabinets and in freezing compartments of home refrigerators. Container (Reynolds Pak), Reynolds Metals Co., Richmond, Va.



13

12 A VUS solid fibreboard container, with cover, replaces the former wood case used by Lehigh Valley Cooperative Farmers, Allentown, Pa., as the carrying case for paper milk containers. Lighter in weight and easier to handle, it holds 12 quart-sized milk containers and is said to have decreased the number of bruised and leaky containers. Delivered flat, it saves warehouse space. Each may be used for several trips. Different one-color printings designate the kinds of milk enclosed: red for regular milk, yellow for cream, blue for buttermilk, brown for chocolate milk, etc. Container, Robert Gair Co., Inc., New York.



14

13 Crown Food Products, Atlanta, Ga., have adopted two new re-usable glass containers for their peanut butter—one a mug with a handle and the other a colorfully decorated tumbler-type jar with matching lithographed cap. Both containers have the eye appeal essential to attract the consumer's attention for impulse purchases. Containers, Hazel-Atlas Glass Co., Wheeling, W. Va. Caps, Anchor Hocking Glass Corp., Lancaster, Ohio. Labels Tompkins Label Service, Philadelphia, Pa.



15

14 Domino Sugar and Cinnamon, for the first time in 25 years, is now being packaged in a shaker-top glass container, the pack having been in fibreboard since 1925. Blown decorations on the private-mold glass simulate enlargements of sugar crystals and the bottom is recessed to permit easy stacking. Traditional Domino blue and red printing on a yellow background are combined in the wrap-around label. The shaker top is yellow with trade name printed in blue. The package has re-use value as a salt and pepper shaker. Jar and closure, Owens-Illinois Glass Co., Toledo, Ohio. Label, William W. Fitzhugh, Inc., Brooklyn, N. Y.

15 Bartolomeo Pio, Inc., is now marketing its wines in a family-sized, versatile, private-mold glass container designed to rest comfortably for easy pouring and for re-use as a handy water jug. Bottle, Gayner Glass Works, Salem, N. J. Cap and Filma-Seal inner seals, Ferdinand Gutmann & Co., Brooklyn, N. Y. Label, Consolidated Lithographing Corp., Brooklyn, N. Y. Cel-O-Seal closure, E. I. du Pont de Nemours & Co., Inc., Wilmington, Del.

No more KP?

THE SOLDIER'S AND HOUSEWIFE'S BURDEN OF POTATO PARING MAY NOW BE LIFTED BY THIS NEW PROCESS AND PACKAGE USING POLYETHYLENE FILM

The cook's dream of never having to peel another potato may come true—thanks to polyethylene. A package now being marketed on a test scale makes use of polyethylene film—either as a transparent bag or as a liner for a kraft bag—to maintain the freshness of specially processed pre-peeled potatoes.

The revolutionary process has been developed and put on a commercial scale by Miller's Pre-Pared Potato Co., Inc., Blue Island, Ill. Already well established is the institutional-sized package—a 30-lb. kraft bag with polyethylene liner—which provides "Readi-Taters" whole or sliced ready for French frying. Market testing is just beginning on the same product in consumer-sized, 5-lb. transparent bags which, effectively printed in red, are to be distributed through retail groceries and supermarkets.

As in so many instances, this development—while obviously important because it means a great convenience to the housewife, a considerable saving in storage space and elimination of waste—nevertheless was of limited value until the product could be suit-

ably packaged for preservation during distribution, a fact which Claud Miller, head of the company, realized fully at the beginning.

The peeled potatoes are put through a solution of harmless preserving chemicals and must be kept refrigerated until used. Both of these facts are responsible for the choice of polyethylene film as the basic packaging material. Polyethylene has a satisfactory low water-vapor transmission rate, it is strong, it is not affected by the chemicals used and it retains all its good qualities at low temperatures.

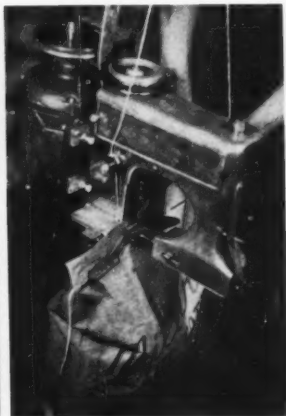
With this protection, bags have been held as long as two weeks in the coolers without product deterioration, according to the company, although deliveries are made to customers at much shorter intervals.

In addition to selecting the proper packaging materials, the company had to organize and equip an efficient packaging line. There are two or three processing steps before the potatoes are put through the preserving bath: peeling and washing, which is an automatic operation; hand inspec-



PRE-PEELED POTATOES, sliced or whole, are now being offered to the housewife in these 5-lb., red-printed transparent polyethylene bags. Claud Miller originated process that helps the potatoes to hold their color for a limited merchandising period.

INSTITUTIONAL-SIZED package is a 30-lb. polyethylene-lined kraft bag, shown being filled on specially built equipment and stitched shut with cord.



tion of the peeled potatoes to remove the eyes and trim them; finally, slicing, in the case of those to be used for French frying. As the potatoes come out of the preserving bath they are carried by gravity conveyor (a mesh belt that allows the excess liquid to drain) to the weight-filling machines. These fillers were specially designed and built to the company's specifications. After the lined kraft bags have been filled and the weight checked, they are put through a small sewing machine which stitches the top of the bag closed. The tops of the film bags are gathered and tied.

Currently the capacity production of Read-Taters is 60,000 lbs. per week, according to Mr. Miller, and his chief concern since introduction of the bags is trying to fill all orders in just the Chicago area.

CREDITS: Polyethylene printed bags, Flexible Package Co., Chicago. Kraft bags and polyethylene liners, Bemis Bro. Bag Co., St. Louis, Mo. Polyethylene film for both bags, Visking Corp., Chicago. Bag-stitching machine, Minneapolis Sewing Machine Co., Inc., Minneapolis, Minn.



FOUR TYPES OF LABELING are used by various packagers: crayon marking, the curved rubber stamp, printed labels (loose or applied) and the imprinted container. Use of window lids has been found to increase sales as much as 100%.

Delicatessen pre-packaging

ROUND, NESTING PAPER CONTAINERS ARE FAVORED PACKAGES

AMONG MARKET OPERATORS WHO HAVE EXPLORED THIS NEW FIELD

Pre-packaging is generally considered as applying only to produce and meats, but throughout the country, food retailers are finding that pre-packaging their delicatessen items, too, speeds turnover, ups sales volume and increases the work efficiency of store help by leveling out the peaks and valleys of productivity during the day. In supermarkets, department store grocery departments and even in the "little delicatessen around the corner"—now often largely a self-service store—pre-packaged delicatessen items are coming to be a "must" to round out the store's whole self-service operation.

The techniques of pre-packaging delicatessen items have undergone a

number of refinements in the last few years. Different types of containers, labels, methods of marking, etc., have been tried and accepted after time and experience have shown which are most popular with the customers and the easiest to handle.

The experience of London Terrace Super Market in New York is a case in point. Located at the corner of one tremendous apartment development and within a short walking distance of several recent housing developments, this store has a steady traffic during the day and exceptionally heavy traffic in the early evening when workers stop in on their way home.

Some eight years ago, Joseph Cohen and Harry Heiligman, co-owners of

London Terrace Super Market, felt that pre-packaging the fastest-moving delicatessen items—cole slaw, sauerkraut, potato salad and baked beans—would meet the need for faster service, greater volume and greater shopper convenience, especially during the rush hours. Square, bucket-type containers then used were at first simply filled and left with the tops open so that the contents could be checked when the customer asked for one of these items; then the top was closed and in a matter of seconds the order was filled.

From this beginning the store's owners constantly sought to improve their pre-packaging techniques and materials. They have since gained a

reputation as pioneers in pre-packaging these items at the retail level and have cooperated in scores of packaging and store equipment tests in the food field; thus many types of containers, labels and marking procedures have been used at the store since 1942.

For the past three years, round, nesting-type, coated paper containers with window lids have been used exclusively by the London Terrace Super Market to pre-package the standard delicatessen items, plus many meats such as sliced liver, kidneys, stewing cube cuts and chopped beef—all moist products. It has been found that most of the problems which resulted from the presence of these products' natural juices—leakage, soaking through, drying out and discoloration—have been eliminated by the use of these containers. To give display and eye appeal, the containers are printed in green on white with red as an accenting color. The lids, also printed in red and green, have the store's name printed across the top in the window border and on the opposite sides of the border in white spots the word "price" and the notation, "Net Wt. ___ Lb. ___ Oz. ___," the packer marking the actual figures during the filling and weighing operation. The name of the product is stamped on the bottom part of the border, using a curved rubber stamp. Eight-, 12- and 16-oz. sizes are used.

This combination crayon-marking-and-stamping system has been found the most successful for them, according to the London Terrace operators, because it permits flexibility and economy. The containers and lids can be used interchangeably for any product and, when the store wants to try a new item, the only expense is for a new stamp. All of the packaging—fresh produce, meats and delicatessen items—is done in workrooms on the second floor of the market; the trays of pre-packaged foods are delivered to the main floor downstairs by a gravity conveyor.

Standardization at London Terrace on the ready-made, liquid-tight paper container for delicatessen items appears to reflect a general trend in this field.

The Field Research Division of the Paper Cup and Container Institute recently completed a spot survey on customer acceptance of pre-packaged foods, pre-packaging materials and methods, particularly as these relate to delicatessen items. The results in-

dicate that retail food dealers have doubled the output of food items pre-packaged in round, nest-type paper containers since 1940. The use of window lids—a growing practice—increases sales often as much as 100%, the survey found.

The pre-packagers interviewed reported that patrons not only purchase items more quickly when they can see the appetizing contents, but that the use of window lids eliminates the problem of waste caused by shoppers mutilating the containers in order to examine the contents.

It was found that retail food outlets pre-package from eight to 50 different items. Delicatessens, department stores and supermarkets with delicatessen departments pre-package the greatest variety. Ham and chicken salad, macaroni and cheese, cole slaw, chop suey, pickles, Spanish rice, banana and butterscotch puddings, baked beans, beef stew, chili con carne, baked apples, escalloped potatoes, egg salad and sandwich spreads were among the great variety packaged in the round-style containers.

The survey disclosed that there are four basic methods of labeling used for this type of container: (1) marking with crayon pencils, (2) rubber stamping, (3) application of printed labels and (4) limited use of imprinted containers where sales volume is large on certain items. Most stores use a combination of these four, as in the case at London Terrace.

In many states, the type of labeling used depends to a certain extent upon the information required by law. In Connecticut, for example, the price per lb. as well as the actual price of

the package must be given. In New York State only net weight and product price are required.

Geographical preferences in sizes of containers for pre-packaged delicatessen items were pointed up by the survey. In the Chicago area, for instance, the 12-oz. size is the favorite, while in the East the 1-lb. size is most popular. Contrary to this generalization, the London Terrace finds that for each 15,000 of the 8-oz. containers sold, 2,000 of the 12-oz. and 5,000 of the 1-lb. containers are sold.

For price reasons, the 12-oz. size is more successful for many items, the survey reported. Keeping the price per package under that psychological ceiling of \$1 for higher-cost items, such as shrimp and chicken salad, often means the use of the 12-oz. size rather than the 1-lb. size. The small 4-oz. containers are popular with some customers because of the low unit cost. Dealers also like these small sizes, interviewers discovered, because the customer is more likely to choose two or three items for variety. The unprofitable "Give me 10 cents worth of that" type of sale is eliminated because the larger quantity is already prepared for the customer.

The effect of pre-packaging delicatessen products has been to give greater sales volume to products with already higher-than-usual profit margins. Drewes Brothers Delicatessen in Brooklyn, for instance, reports that pre-packaged delicatessen has shown the biggest sales gain of any department in the company's newest store. In El Monte, Calif., Crawford's Village Store pre-packages about 50 items in nested- (Continued on page 188)

GROUND BEEF in paper containers is a big seller in delicatessen department of London Terrace Market, New York. Pre-packaging of delicatessen, meat and produce is done in second-floor room; nested empty containers save space.



How's your Moisture

APPLES — This moistureproof bag packaged on automatic machines—ideal for self-service selling—holds fruit in prime condition

MARGARINE—Success of this "squeeze-mix" package proves Pliofilm's toughness

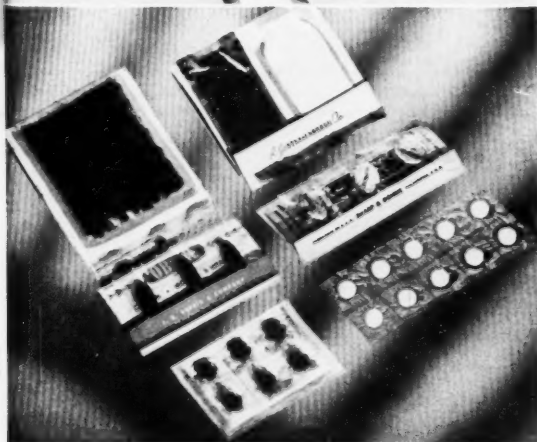


GOT a moisture problem in packaging? Look what **Plio**film does for these moisture-sensitive products!

Pliofilm is highly impervious to air, moisture, liquids. It *controls* the moisture level, keeping moist foods *moist*, dry foods *dry*. Wrapped in **Plio**film, foods reach the consumer at top taste and quality. Sales appeal is heightened, too, by **Plio**film's crystal-clear transparency.

If you're packaging a moisture-sensi-

*Plio*film—T. M. The Goodyear Tire & Rubber Company



DRUG PRODUCTS—Keeps hygroscopic tablets and powders moisture-free



NATURAL CHEESE—No rind, no waste, no mold—Pliofilm keeps it naturally moist

KRAUT and WIENERS — Packed in brine, Pliofilm prevents leakage because it's liquid-tight

Control?

tive product, it belongs in this picture! For further information on quality-protecting, sales-building Pliofilm, write: Goodyear, Pliofilm Dept., Akron 16, Ohio.



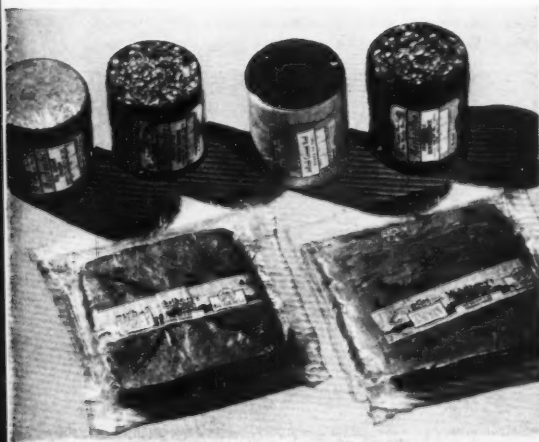
Good things are better in

Pliofilm

3-way protection against air, moisture, liquids

GOOD YEAR

THE GREATEST NAME IN RUBBER



COLD CUTS—In economical, meal-size packages that eliminate waste ends



DRIED FRUITS—Keep tart and tangy for longer, in Pliofilm

Character bottles

REVIVAL OF INTEREST IN THESE DRAMATIC PACKAGES IS SPURRED

BY THE MORE PRACTICAL, MODERN TECHNIQUES OF PRODUCTION AND HANDLING

Now that glass makers are once more able to supply almost anything in the way of a private mold, interest in the old-time character bottle is showing signs of revival. Significantly, these so-called "figure" bottles—molded in the shape of some person, animal or familiar object—have been much in evidence among the cosmetic gift packages on the counters this Christmas.*

The time-proven novelty appeal of the character bottle makes it a natural for this class of product. However, it is hardly fair to the character bottle to consider it only as a novelty, for in the past as well as now many cosmetic, liquor and food products have attributed a good portion of their success to this type of distinctive bottle.

The bottles rate high on remembrance value, on the interesting possibilities for re-use that they offer to

the consumer and on the general good public relations they have brought to many of the companies which have used them.

While the use of character bottles is limited to a degree by production costs, it is noteworthy that most of the designs of the more modern types are streamlined for low-cost machine molding. In addition, various types of vacuum-filling machines are now on the market that have been specifically developed for small bottles of unusual shape, so that the handling procedure is not difficult, according to packagers who are using them.

Since many of the designs for modern character bottles owe their inspiration to older ones, some of these old, extinct bottles—most of them now collectors' items—are illustrated here for their "idea" value. Many of them, it should be pointed out, were not hand blown as one would surmise from their appearance, but were pressed glass. Their shapes

can be modified even further for machine molding without losing the charm and appeal which have made them popular for so many years.

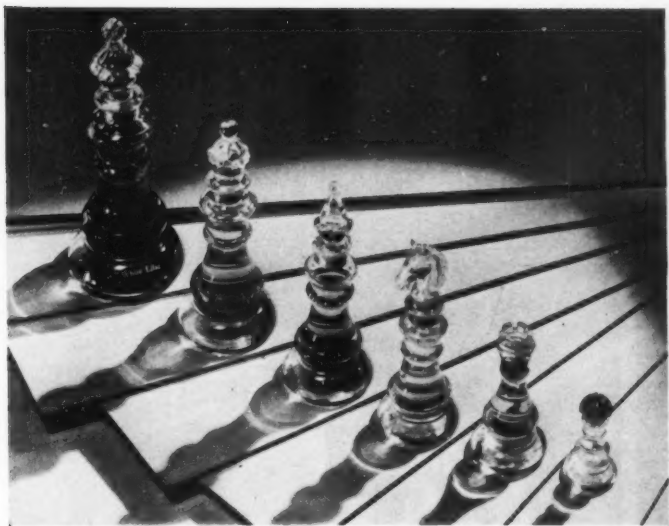
The character bottle that is generally regarded as the granddaddy of them all, the famous Moses bottle, was first used about 1860 by the Poland Spring Mineral Co., Poland Spring, Maine. The bottle memorializes the Biblical character Moses, sitting with his staff before the rock which, when he "smote" it, issued forth water. It is often familiarly called "Old Man Whiskers" and was for some reason or other erroneously thought by many consumers to represent one of the bearded members of the original Rickers family who bottled and sold the mineral water. The first batch of Moses bottles proved too fragile for the shipping rigors of that day, but later models were molded that stood up quite well. It is estimated that well over 140,000 of these bottles were produced.

* See "Pictorial Preview of Trends in Cosmetics," MODERN PACKAGING, Sept., 1949, p. 84.

Quaint collector's items from the past provide

1890 MODES are reflected in (left to right) Grover Cleveland bust, for liquor; feminine leg (French wines); John Bull (bitters); baby's head with trapped glass marble in base (infant emulsion); standing-on-head circus lady (French wine); Van Dunck coachman (schnapps); ear of corn (bitters); log cabin ("Booz" whiskey); Victor Hugo bust (French wine).





MODERN EXAMPLE of successful character bottles is the Mary Chess perfume line in hand-polished glass shaped like chess pieces—which serve the dual purpose of perpetuating the brand name while inspiring the collector.

In the foreground of the illustration at the bottom of Page 112 can be seen a small character bottle that was used by a now-forgotten baby-food manufacturer about 1880 when character bottles were at the height of their popularity. The 3 1/2-in.-high bottle, molded in the shape of a baby's head with the baby's face of

frosted glass, has a small circular rim molded inside the bottom and contains a marble about the size of a pea. When the infant's emulsion had been consumed, the bottle served as a fascinating toy for older children who, by careful shaking, could juggle the marble into the little rim. The frosted-glass bust bottles of Grover



FAMOUS OLD TIMER was the Moses bottle for Poland Water (1880-90), still sold by company as souvenir.

Cleveland and Victor Hugo shown in the same illustration are typical of that era and were liquor bottles, as was the dark bottle in the shape of a log cabin on the right, which was used by E. C. Booz for his "Old Cabin" whiskey. The latter idea is not unique; variations of the log-cabin shape were used by several companies.

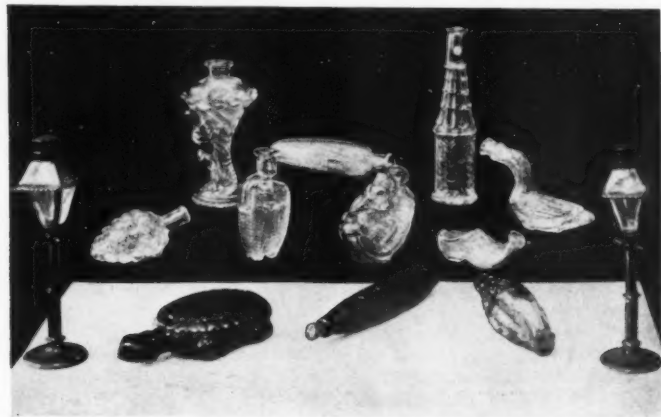
The imagination of the American makers of bitters and patent medicines knew no bounds. Along with whiskey distillers, they were fond of log-cabin shapes, which predominated during the "log cabin and hard cider" political campaigns of the last century. They also indulged in such distinctive designs as pineapples, man-in-the-moon half-moon shapes and fish. Brown's Celebrated Herb "Indian Queen" came in a statuette bottle representing an Indian queen and the bottle is now quoted on the collectors' market at \$10 to \$15.

Many of the most unusual shapes, such as those in the illustration at the bottom of this page, were designed for colognes and perfumes. The boy-holding-the-cornucopia and the baby-Moses-in-the-bullrushes (in center of picture) are particularly ingenious molds. Even lamp posts were simulated.

One ancient character bottle that has survived to this day is the "bear" bottle used by Ste. Pierre Smirnoff,

inspiration for today's designer

PERFUMERY BOTTLES of 19th century gave full rein to imagination, ranging from miniature lamp posts to church steeples, geese, slippers, ears of corn, turtle, cigar, boy holding cornucopia and baby Moses in the bullrushes.





FIDDLE SHAPE has always been popular in bottles and it is used today for Corday's Zigane perfume to tie in with romantic violinist theme of brand advertising.



RUSSIAN BEAR bottle for Kummel is an old-time mold revived by Ste. Pierre Smirnoff, subsidiary of G. F. Heublein & Bro.



TRADEMARK REPLICA is idea for Sandeman Spanish wines. Of black ceramic, bottle has yellow "cup"; hat is top of cork closure.

a subsidiary of the importing firm of G. F. Heublein & Bro., Hartford, Conn., for its Russian kummel. The original bear bottles were green or milk glass. For years Russian sailors made extra money by selling their "empties" in the Northwest as souvenirs. Now Heublein's Russian kummel is back in a modified bear bottle that is color sprayed.

A story about these bear bottles served to emphasize the popular appeal character bottles possess. The purchasing agent at Heublein's recently furnished some empties for use as candlestick holders for the tables at a church banquet. They were so admired by the people attending the dinner that, to solve arguments as to who should get them, the church auctioned them off for a tidy sum.

Modern derivations

While the early bottles memorialized famous persons or familiar objects of the day, the trend in modern character-bottle design is to have the shape represent some object symbolic of the company's name or the name of the product. In such cases the bottles provide invaluable aid as merchandising devices.

Three striking and successful examples of this are the Prince Matchabelli crown-shaped perfume bottle, the Mary Chess chess-piece perfume bottles and the Sandeman "Don" bottle.

The Matchabelli crown bottles were launched when Prince Matchabelli first started the perfume company in 1926. The shape was copied from the crown that appeared on his family coat-of-arms and it has made history as the identifying trademark of the products in packaging, promotion and advertising. In 1946 one of the Matchabelli crown bottles, encased in a block of clear acrylic, won the top award in the annual Toilet Goods Assn. competition.

In the case of the chess-piece bottles used by Mary Chess, Inc., the symbolism has been equally successful. The design of these hand-polished perfume bottles was inspired by an 18th century chess set owned by the Hohenzollern family. The first one, the queen, was introduced in 1938 and the last bottle, the bishop, was added in 1946. In addition to the chess-piece series, Mary Chess has a collection of one-of-a-kind antique bottles, vinaigrettes and boxes which may be filled with perfume,

toilet water or powder on special order for that "ultra" gift.

Geo. G. Sandeman, Sons & Co., Ltd.'s ceramic "Don" bottle is one of the more recent of contemporary character bottles. It was designed to capitalize on the company's famous black-cloaked Spanish Don trademark. Used for over 15 years as a package for the company's finest port and sherry, it is made for Sandeman by a famous English china manufacturer, whose seal appears on the bottom of each bottle.

Prewar examples

Just before World War II, there was a decided trend toward the use of character bottles and many interesting examples were seen on the shelves and in displays. While it was a novelty package planned for promotion during the New York World's Fair, the whiskey bottles molded in the shape of the Empire State Building used by Schenley Distilleries were fine examples of present-day character bottles and are now considered collectors' items. Between 1939 and 1941, Irving W. Rice & Co. introduced a cologne bottle in the shape of a grape cluster, the design an adaptation of one of the old-time

character bottles; Eisenberg & Sons put its "Little Lady" perfume in a bottle shaped like an old-fashioned lady in billowing hoopskirts; Helena Rubinstein's "Cala Performance" perfume made its debut in bottles shaped in the form of a ballerina.

Aside from a commendable refinement of design details, about the only apparent difference between modern and antique character bottles is the change to modern closures made of plastics or metal, in place of the old-time rough corks. Special-mold glass stoppers—as on the Mary Chess perfume bottles—can also be used to provide a finishing touch. Specially molded plastic closures offer limitless possibilities.

Perhaps the most striking observation to be drawn from any study of the character bottle is the general failure to exploit it for utilitarian products, as distinguished from the costly perfumes and liquors. A memorable and expressive character bottle need not be expensive and it can be perfectly practical to fill, label and cap on existing automatic lines—as demonstrated by the highly successful honeycomb-replica bottle for Lake Shore strained honey, introduced recently by the Walter F. Straub Co., Chicago. A more perfect example of the possibilities of the character bottle in the food field would be hard to imagine. About the only other examples in this field that come to hand are three mustard jars—one, introduced by the Bailey Mfg. Co. in 1939, shaped like a pig sitting on his haunches, with a slot

on the closure to suggest its re-use as a piggy bank. Another, used by Nash-Underwood, Inc., Chicago, in the shape of "Lucky Joe's" face, also to be re-used as a bank. The fact that the M. A. Gedney Co., Chicago, only recently brought out a new "piggy bank" mustard jar shows once again that low-cost products can be packaged economically in modern-styled character glass.

In designing modern character bottles, companies can utilize not only new techniques in glass making which give them sturdier bottles that will go through packaging lines and distribution channels without undue breakage, but also they can take advantage of improvements that have been made in the inks for silk-screen labeling and the development of applied ceramic color labeling (ACL). These technical advances open new paths for the designer.

Although the molding and filling considerations need not present insurmountable problems, the glass and machinery suppliers should definitely be consulted in the planning stage. The designs must be studied also from the selling point of view, where consideration needs to be given to stock-shelf limitations and display requirements. Many companies have found a solution to these problems by using folding cartons or paper set-up boxes—usually with a window to show off the bottles—as outer packages.

ACKNOWLEDGMENT: For much of the information and many of the



PIGGY BANK mustard jar, just introduced by M. A. Gedney Co.

photographs used with this article, MODERN PACKAGING is indebted to Clarence T. Hubbard, West Hartford, Conn., and his collection of old bottles.

CREDITS: Mary Chess bottles and glass stoppers, Swindell Bros., Inc., Baltimore. Heublein bear bottle manufactured and decorated by Kimble Glass, Division of Owens-Illinois Glass Co., Toledo, Ohio; closure, Anchor-Hocking Glass Co., Lancaster, Ohio. Lake Shore Honey bottle, Owens-Illinois Glass Co., Toledo. Sandeman "Don" bottle, Doulton Co., Ltd., London, England. Zigane perfume bottle, Choisy-le-Roi, Paris, France. Gedney mustard jar and closure, Hazel-Atlas Glass Co., Wheeling, W. Va.

IN THE LOW-COST FIELD are these three simple but expressive character bottles. Dog and his doghouse window carton (left) made a "cute" package for Manon Freres cologne during the 1948 Christmas season. Nash Underwood's mustard jar (center) molded in the form of a man's head had slotted lid that made it re-usable as "Lucky Joe" bank. Outstanding example of food-field possibilities is this highly successful honeycomb jar (right) for Lake Shore strained honey.



PHOTO COURTESY OWENS-ILLINOIS GLASS CO.

This corrugated box for shipping Jewel Light Bulbs doubles as an economical display unit with a minimum of set-up difficulty for the dealer. A large lithographed broad-side packed inside is pasted on the front of the box. One of the four display cartons enclosed is put on top to complete the display unit. Shipping box and display carton, Hinde & Dauch Paper Co., Sandusky, Ohio.



Realistic jets of flame glowing against a contrasting black background create an eye-catching design for the display cartons for Tricolator Co.'s new Flame-Tamer, a top-of-stove steel cooking aid. The product in action is shown on the display panel. Design, George Reiner, New York. Cartons, Arme Folding Box Co., New York.



To introduce their Puritan baked beans in glass bean pots, Maine Canned Foods, Inc., use a paper-board display holding one of the new containers. Product is heated and served in the re-usable pots. Jar, Owens-Illinois Glass Co., Toledo, Ohio. Metal lithographed closure, White Cap. Co., Chicago.

DISPLAY

This display for four different types of automotive filters made by Fram Corp. suggests a dramatic way of showing a variety of small packaged items effectively at point of sale. The illustration of the motor graphically places each filter at its point of use. Display, Einson-Freeman Co., Inc., Long Island City, N. Y.





The Bayer Co. Division, Sterling Drug, Inc., is distributing these self-service merchandising units for displaying all four sizes of Bayer Aspirin. Constructed of wood and heavy paperboard and finished in light wood-grained paper, the unit measures 9 by 7 by 4 in. All of the packages are arranged to give maximum display. Display, Leopold Sonn & Bro., Inc., New York.



Hack-saw blades, which are customarily stacked on shelves, are brought out on store counters with this compact and inexpensive paperboard display unit. The oval base is covered with an orange and black label. Base and riser are printed identically on both sides, making it suitable for island counter use. Design, Frank Condon, New York. Display, Hemmway Corp., Waterbury, Conn.

GALLERY

The Upjohn Co.'s vitamin preparations are displayed in drug-store windows by this new three-dimensional unit. The story-telling center section appeals to both parents and youngsters. Side pieces are at angles to the large back section, which shows how sanitary the product is packaged. Display, Forbes Lithograph Mfg. Co., Boston.



Folding paperboard display cartons bring to the consumer's attention Northam Warren's new-formula Odorono Spray Deodorant, packaged in a polyethylene plastic squeeze bottle. A white closure provides smart contrast for the blue colored bottle. Bottle and cap, Plax Corp., Hartford, Conn.





UNIFIED APPEARANCE in a wide variety of package forms is achieved by consistent use of the "smorgasbord girl" in red, white and blue color scheme. In left foreground is new-type window carton having a complete liner of acetate film.



SMORGASBORD GIRL

A NEW, AGELESS TRADEMARK UNIFIES THE LINE

AND IDENTIFIES SCOTT PETERSEN PRODUCTS AS SPECIALTY MEATS

Does your package design forcefully and unmistakably reflect the nature of your business? Does it incorporate a trademark or other identifying elements which can be carried over into advertising and merchandising activities, giving your company's entire sales program unity and effectiveness?

Recently Scott Petersen, Jr., president of Scott Petersen & Co., Chicago, analyzed his company's line of packages and wraps and decided that, by the above criteria, they were not doing the kind of job required of them.

As a producer of quality sandwich meats, the company had built up a highly successful business through independent food retailers, specializing in Scandinavian products such as Fleske Polse, potato sausage, Kalv Sylta and Gothenberg sausage, which had formed the backbone of its operations since the founding of the company nearly half a century ago. In the early days, when Grandfather Petersen personally delivered to the stores by horse and buggy, distribution was confined to retailers serving Chicago's large Scandinavian popula-

tion. Before long, however, the growing popularity of the Scott Petersen line necessitated its extension to many additional outlets.

For many years, the company had used as its trademark an illustration of an airplane with the slogan, "Quality above all." Some attempt at modernization had been made when a newer type of plane supplanted the original drawing, but the tie-up with meat products, Mr. Petersen reasoned, was still rather remote. Obviously, some unifying package element was needed which would better express



CASED MEATS have double trademark so identity is not lost if loaf is cut in half; even smaller portions are identified by repetitive pattern of name on casing. Trade figure even appears on tags attached to potato sausages in tub.

the nature of the company's operations and the range of products offered. The problem was turned over to a package designer whose work has included a number of products in the food field. Investigation showed that the company had been taking the specialty aspect of its business for granted, without attempting to exploit the inherent promotional values. The suggestion was made that the firm's emphasis on authentic Scandinavian-style products might provide a logical packaging and merchandising theme, keyed directly to the rising popularity of smorgasbord-type meals. This line of thought was stimulated by discovery of an earlier sausage-casing design used by the company which had featured a Scandinavian peasant girl.

The result of this activity was to bring the entire Scott Petersen packaging and merchandising program "down to earth." The soaring airplane has been replaced by a pleasant, doll-like young lady in appropriate Scandinavian costume, including figured

apron and full-sleeved peasant blouse. Above her head, crowned with blond pigtails and a saucy cloche, she holds a huge tray loaded with tasty sandwich meats—literally a smorgasbord on the wing, instead of an airplane. This energetic new trade character, now appearing on an increasing number of Scott Petersen packages, serves as the dominant element in the company's revitalized merchandising program.

Red and blue are the basic colors used on most of the Petersen packages and wraps. This is a direct carry-over from the earlier packages, some of which are still being used until inventories are exhausted. Printed paperboard "boats" and 3- and 5-lb. folding boxes for such products as sliced bacon, pork sausage and wieners carry the company name and product description on the top panel—the former in red italic letters and the latter in white caps against a solid blue background. Wide red and blue bands encircle the boxes horizontally, with company and product names in

white reverse letters on front and rear panels. Package ends highlight the firm name and address within a modified oval.

Many of the company's sausage and meat-loaf items are stuffed in

FORMER PACKAGES used airplane ("Quality above all") as a trademark. Sylta casing in center introduced peasant girl, inspiration for present redesign.



printed cellulose casings. On these products the new "smorgasbord girl" appears in bright blue, yellow and red, posed so that her right hand directs attention to the product name in reverse white on a solid color background. Company identity appears on a ribbon-like band tying in directly with the trade figure and on a yellow panel just above the trademark.

One problem with products of this nature is that of preserving brand identity when the casing is cut in two for display in the retailer's meat case, or when portions are sliced off for sale. To meet this difficulty, the design elements are duplicated on each half of the casing, maintaining full display advantage even when the product is divided at the center. In addition, the designer has worked out an all-over background pattern in which the company name is repeated at close intervals; this insures that even relatively small portions will have brand identity.

New-type window carton

For its 1-lb. package of pork sausage links, the company recently adopted a new-type patented window carton on which the trademark character appears at each end of the top panel, against a bright red background. End panels of this package carry the company's new slogan, "Sold where finest foods are found," while front and back faces bear the manufacturer's name and the statement, "Solely from fresh, lean pork shoulder

meat." The bottom of the package, where the opening flap is located, carries information on cooking and storing the product and mentions other items made by the company. Inconspicuous guide lines show the dealer where to divide the package for half-pound sales.

This carton is set up rapidly from flat blanks at the Scott Petersen plant with the aid of a simple, compact, manually operated device leased from the carton manufacturer. The package is unusual in that it contains a complete liner of transparent cellulose acetate film which also forms the window portion. It is so designed that the integrity of the greaseproof liner is maintained even at points where the unique prong locks pass through the outer wall. Since the acetate film is relatively permeable, permitting meats to "breathe," condensation of moisture and clouding of the carton window are minimized. Bellows corners, combined with securely locking prongs, render the carton unusually sturdy and prevent meats from falling out. An accompanying illustration, showing four versions of this type of package as used by other companies, indicates the shape of the flat blanks and shows how the acetate film is used to form the entire inner surface of the carton.

Introduced a few months ago at the annual meeting of the National Independent Meat Packers' Assn., this patented type of carton was developed expressly to afford self-service pack-

aging of various meat products without sacrificing protective properties. It has enjoyed rapid acceptance among packers and has demonstrated its ability to boost sales of such products as wieners, dried beef, bacon, sausage and luncheon meats. Due to the protection afforded by the odorless, nontoxic lining, the package can be retained as a storage container in the home refrigerator until the last of the food is used—an important factor in maintaining product identity in the home.

Paper and parchment

Country-style pork sausage and potato sausage are distributed to retail outlets in continuous, linked lengths, to be cut off in the amounts desired by the purchaser. For such products, the company employs printed, paraffin-coated paper containers in 170 fl. oz. size, with snap-in lid. These tubs, printed in red and blue, feature the new trade character on both front and back. One wide band encircling the container at the bottom and three narrower bands give the package a three-color effect which makes it an effective institutional advertising medium at the point of sale.

On white parchment wraps for ham, sliced bacon, slab bacon and Sylta, the "smorgasbord girl" stands out sharply in red and blue, with the same combination of colors used on the company and product name and other label data. It is similarly carried through (Continued on page 178)

WINDOW CARTON. fitted with a greaseproof acetate liner, is set up from blank on a hand-operated fixture.



TYPES OF BLANKS using the spot-sealed acetate liner which not only forms window, but gives unusually high protection to perishable meat products. Bellows corners and unique prong locks give package added sturdiness.

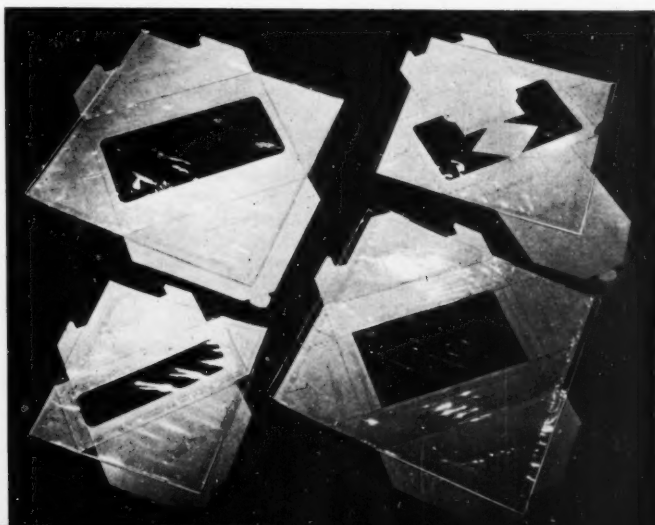


PHOTO COURTESY INTERSTATE FOLDING BOX CO.

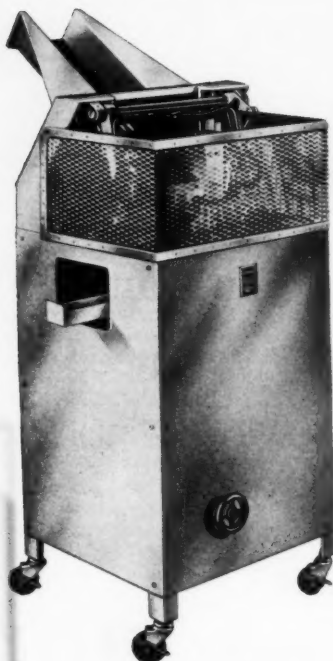
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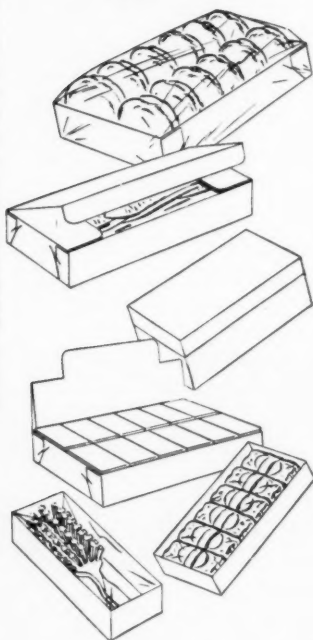
—so urgently needed today—are being achieved in plant after plant. Using inexpensive die-cut blanks, the machines produce finished trays and cartons that are sturdy, neatly formed and ideally suited to *high-speed overwrapping*. The savings over the cost of buying factory processed cartons, and on the cost of erecting or forming cartons by hand, are truly striking. A machine often pays for itself in a matter of months.

THE TRAY-LOCK machine sets up lock-type trays and cartons from flat die-cut board that requires no gluing. Handles a wide range of carton sizes and styles, including end lock, side lock, hinge cover and display top cartons.

THE FINISHED EDGE CARTON FORMER sets up open top double-wall trays or cartons from flat die-cut board. No gluing required. All four edges are finished. They may be used as is or as tops and bottoms of telescope boxes. Web corner construction of the finished edge retards leakage when packed with fish, frozen foods, etc.

Speeds of up to 90 cartons per minute are possible with either machine. One person can feed a number of machines.

For lower carton costs don't fail to get complete information on these machines. Write or phone our nearest office.



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MACHINERY COMPANY**
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SPRINGFIELD, MASSACHUSETTS



TECHNICAL

ENGINEERING • METHODS • TESTING

Charles A. Southwick Jr. • Technical Editor

Tomato-film findings

EVIDENCE IS OFFERED THAT, EVEN WITH THE MOST PERMEABLE FILMS,

PACKAGE VENTILATION IS ESSENTIAL. By Albert S. Allen and Nelson Allen*

The ripening and packaging of tomatoes has grown over the past few years to be an industry of great importance and has revolutionized the methods of merchandising this popular produce item. Beulah C. Robertson (1)[†] of the Container Section, Fruit and Vegetable Branch, U. S. Department of Agriculture, estimated that 85% of the tomatoes sold in retail stores are now packaged in consumer units. Donald R. Stokes, Production and Marketing Administration, U. S. Department of Agriculture, speaking at the First National Conference on Pre-Packaging in New York City in October, 1949, gave the average production of tomatoes for the fresh market for 1946-1947 as 31,529,000 bushels. Tomatoes rank fifth by weight in the production of all vegetables, being exceeded only by potatoes, cabbage, lettuce and onions.

Generally, tomatoes are packaged in window cartons or in trays overwrapped with transparent films. Each method has its particular advantages. The overwrapped tray is favored by many operators because it gives a sealed, tamperproof package. Cullom (2) discussed the subject in April, 1949. With regard to the transparent flexible films used as overwraps or windows, Mrs. Robertson stated, "While considerable improvement in film formulas and their application to specific products has been made in

the past year or two, research continues and it is not apparent from present information that a final conclusion has been reached as to the film best suited to packaging tomatoes."

Transparent flexible films

As is well known, fresh fruits and vegetables are living organisms and, in their respiration, absorb oxygen and give off carbon dioxide, water vapor and other gases. The effect of packaging on the normal life processes must therefore be considered.

Considerable confusion appears to exist in the trade as to the gas perme-

ability of transparent flexible films and the effect of such film wraps on fresh produce. Platenius (3) covered this matter very thoroughly in October, 1946.

Some of the data reported by Platenius are shown in Table I.

Platenius calculated the required oxygen permeability of a film for a number of produce items as shown in Table II.

The failure of films to transmit sufficient oxygen was confirmed by Platenius in actual tests on packaged produce. He concluded that all of the films now used for pre-packaging possess a low permeability to oxygen. If seals were made airtight, the sup-

TABLE I—OXYGEN PERMEABILITY OF TRANSPARENT FILMS
[From Hans Platenius]

Type of film	Thick- ness—in.	Ml. O ₂ / sq. meter/24 hrs.*
Cellophane		
300 MSAT	0.0009	240
Pliofilm 140		
P5F	0.0014	510
Cellulose		
acetate A	0.0012	3,000
Cellulose		
acetate B	0.0009	3,400
Cellophane		
PT	0.0008	6,300
Ethyl-cel- lulose	0.0012	16,000

* Measurements were made under the following conditions: Temperature 75 deg. F., R.H. 100% and 60%, respectively, on two sides of test film. Difference in partial pressure of O₂ across test film, 1/2-1/3 atmosphere. The data were recalculated to a partial pressure difference of oxygen of 760 mm. Hg. Volume of O₂ was corrected to standard conditions.

I. INSPECTION of stem ends is permitted by this type of tomato tray, with series of windows on bottom. Mold usually starts at stem end and permeable window film reduces this tendency by venting trapped water vapor. Photo shows side and bottom of two overwrapped tray packages.



* Both of the Cellophane Division, E. I. du Pont de Nemours & Co., Inc., Wilmington, Del.

[†] Numbers in parentheses identify "References" appended.

TABLE II—REQUIREMENTS FOR OXYGEN OF DIFFERENT VEGETABLES AND REQUIRED OXYGEN PERMEABILITY OF TRANSPARENT FILMS USED FOR PRE-PACKAGING
(From Hans Platenius)

Vegetable	Ml. O ₂ required per lb. per hr. at 75° F.	Required O ₂ permeability of film expressed as ml. O ₂ /sq. meter/24 hrs. (O ₂ gradient = 1 atm.)	
		50° F.	75° F.
Asparagus	174.0	101,500	355,100
Peas in pods	99.0	72,200	202,100
Snap beans	81.0	47,200	165,300
Spinach	80.0	45,400	163,300
Peppers	20.5	13,100	41,800
Carrots	16.7	12,600	34,100
Head lettuce	11.1	8,100	22,700
Tomatoes	12.0	7,700	24,500
Cucumbers	11.2	8,500	22,900
Potatoes	3.0	2,000	6,100

ply of oxygen was insufficient to maintain a normal course of respiration of the packaged produce and rapid breakdown resulted. In order to avoid possible breakdown from anaerobic respiration he recommended that some degree of ventilation be provided for all kinds of packaged produce.

Scott and Tewfik (4) after experiments on packaged tomatoes stated, "However, it would seem advisable to provide ventilation of the package by perforation of the film, rather than depend upon defective seals to pre-

vent oxygen depletion in film-wrapped packages of tomatoes." They concluded, "Until we have more complete information of the physiological response of each particular product to abnormal atmospheric conditions, it will be wise for the pre-packager to assure adequate ventilation of the film-wrapped produce."

Claypool (5) states, "Many researchers feel that no film now in use is sufficiently pervious to oxygen and carbon dioxide to meet all conditions, while perhaps none is too impervious under many special conditions. In

TABLE IV—OBSERVATIONS ON FIRM, RIPE, PINK TOMATOES HELD FOR FOUR DAYS AT 65 TO 75° F.

Film wrap	Ventilation	% oxygen	% carbon dioxide	Color*	Odor*	Taste*
300 LST	Yes	19.0	2.0	10	10.0	10
300 LST	Yes	18.5	1.2	10	10	10
300 LST	Yes	19.5	1.4	10	10	10
Averages:		19.0	1.8	10	10	10
300 LST	No	15.5	20.0	9	5	3
300 LST	No	13.5	21.8	9	5	3
300 LST	No	14.0	21.0	9	5	3
Averages:		14.3	20.9	9	5	3
100 cellulose acetate-1	Yes	19.5	2.0	10	10	10
100 cellulose acetate-1	Yes	19.5	1.8	10	10	10
100 cellulose acetate-1	Yes	19.0	2.0	10	10	10
Averages:		19.3	1.9	10	10	10
100 cellulose acetate-1	No	11.0	7.0	8	6	4
100 cellulose acetate-1	No	9.5	5.0	8	6	4
100 cellulose acetate-1	No	10.0	6.8	8	6	4
Averages:		10.2	6.3	8	6	4
100 cellulose acetate-2	Yes	19.5	1.6	10	10	10
100 cellulose acetate-2	Yes	19.5	1.0	10	10	10
100 cellulose acetate-2	Yes	19.0	2.0	10	10	10
Averages:		19.3	1.5	10	10	10
100 cellulose acetate-2	No	15.5	2.8	8	6.5	5
100 cellulose acetate-2	No	16.0	4.0	8	6.0	5
100 cellulose acetate-2	No	17.0	3.0	8	7.0	5
Averages:		16.2	3.3	8	6.5	5

* Explanation of ratings on color, odor and taste: 10 = perfect, 7 = borderline, below 7 = unsatisfactory.

TABLE III—CONCENTRATIONS OF OXYGEN AND CARBON DIOXIDE IN PACKAGES OF MATURE GREEN TOMATOES HELD FOR 11 DAYS AT 65 TO 75° F.

Film wrap	Ventilation	% oxygen	% carbon dioxide
300 LST	Yes	19.5	1.0
300 LST	Yes	19.3	0.9
300 LST	Yes	19.5	0.7
Averages:		19.4	0.9
300 LST	No	15.5	9.4
300 LST	No	12.0	20.2
300 LST	No	10.3	17.4
Averages:		12.6	15.7
100 cellulose acetate-1	Yes	19.0	0.8
100 cellulose acetate-1	Yes	19.5	0.9
100 cellulose acetate-1	Yes	20.0	0.8
Averages:		19.8	0.8
100 cellulose acetate-1	No	15.8	3.1
100 cellulose acetate-1	No	13.5	3.6
100 cellulose acetate-1	No	9.5	4.4
Averages:		12.9	3.7
100 cellulose acetate-2	Yes	20.0	0.7
100 cellulose acetate-2	Yes	20.0	0.8
100 cellulose acetate-2	Yes	20.0	1.2
Averages:		20.0	0.9
100 cellulose acetate-2	No	18.0	2.0
100 cellulose acetate-2	No	18.5	2.3
100 cellulose acetate-2	No	17.0	2.8
Averages:		17.8	2.4

order to avoid possible harmful atmospheres from building up within the package, punch holes are often made in the film."

Experimental

The following experiments show the need for adequate ventilation in tomato packages.

Experiment 1. The color plate (Fig. 2) shows the results obtained in packaging mature green California tomatoes in ventilated and unventilated tray packages overwrapped with various films. The photograph was taken after 10 days' storage at room conditions, 65 to 75 deg. F. The effect on ripening is plainly evident. Of the unventilated packages, only the 100 cellulose acetate-2 showed some slight signs of ripening.

Each of the packages in the color plate was analyzed after 11 days'

storage to determine the per cent of oxygen and per cent of carbon dioxide in the contained atmospheres. The data obtained are given in Table III. The decreases in oxygen content and increases in carbon dioxide content in the unventilated packages are quite apparent.

The LST cellophane film is a new type, of intermediate permeability to water vapor, that has been developed recently for packaging of the relatively dry types of produce items, such as tomatoes.

Experiment 2. Firm, ripe, pink, California tomatoes also were packaged in the same films as used in the tests reported in Table III. After

four days' exposure at room conditions at 65 to 75 deg. F., the packages were analyzed for oxygen and carbon dioxide and observations were also made on color, odor and taste of the tomatoes.

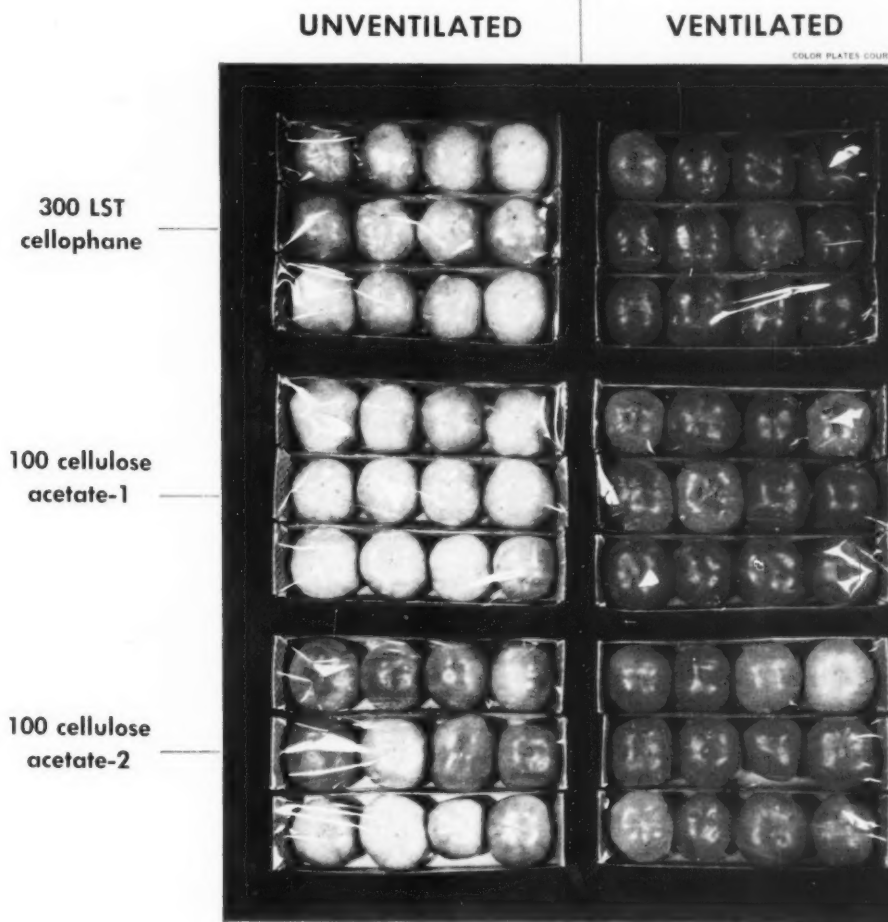
The data obtained are given in Table IV.

The data in Table IV show that firm, ripe, pink tomatoes have a somewhat higher respiratory rate than the mature green tomatoes. The observations also indicate that, for perfect results, ventilation is necessary no matter what the type of film or the degree of ripeness of the tomatoes. These two experiments demonstrate that the oxygen permeability of the nonventilated

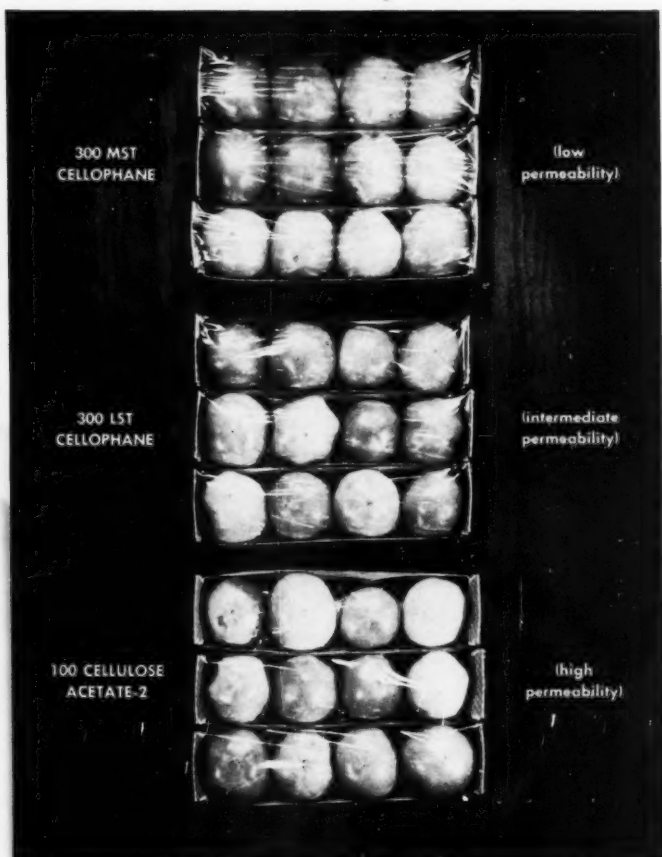
films is not sufficient to supply the requirements for tomatoes, and check the findings of Platenius and several others.

Experiment 3. Claypool (5) points out the need for attention to the water-vapor permeability of the film wrap. "One additional point should be made" he says, "this in regard to the influence of film packages on the growth of decay organisms. A high relative humidity builds up in film packages. It is highest in the most retentive films.

"The spores of many decay organisms are able to germinate and invade the tissue when the relative humidity approaches saturation. As



2. EFFECT OF VENTILATION on ripening of mature green California tomatoes, packaged in various types of transparent films, ventilated and unventilated. Color photograph of this group of packages was taken after 10 days' storage at 65 to 75 deg. F.



3. EFFECT OF WVP on film appearance (fogging and wrinkling) is shown by this comparison of three packages wrapped in different films of varying degrees of water-vapor permeability, as indicated. All three of the packages illustrated had been given alternate 24-hour exposures to 72 deg. F., 80% R. H., and 40 deg., 60% R. H. for 10 days before this photograph was taken.

a result decay may be more serious in packages than would be the case with bulk products. This points with even greater emphasis to the importance of holding pre-packaged commodities at the lowest suitable temperature possible during the entire marketing period."

Tomatoes are not subject to high weight losses as are green leafy vegetables, because of the nature of their skins.

Use of wrapping films of a higher degree of water-vapor permeability is advisable to retard mold and also to reduce fogging due to the condensation of liquid water within the package.

Table V gives data on weight loss and mold for ripe, red tomatoes held at 65 to 75 deg. F. for 11 days. The long holding time was used to accentuate weight loss and mold.

Mold on tomatoes usually starts at the stem end. Even in the more permeable films, moisture is frequently trapped in the area of the stem end by the tray and the tomato itself. This behavior argues for packages as shown in Fig. 1, in which the stem ends can be inspected easily by the customer.

The absence of board also gives a higher permeability to water vapor and may reduce the tendency to mold in this area.

TABLE V.—DATA ON % WEIGHT LOSS AND MOLD FOR RIPE, RED TOMATOES HELD FOR 11 DAYS AT 65 TO 75° F.

Film wrap	Water-vapor permeability	% wt. loss	Mold ratings*
100 cellulose acetate-1	High	2.5	9
100 cellulose acetate-2	High	2.5	9
300 LST	Intermediate	2.2	9
300 MST	Low	0.8	5
300 MSAT	Low	0.5	6

* Explanation of mold ratings: 10 = perfect, 7 = borderline, below 7 = unsatisfactory.

Experiment 4. In addition to accelerating mold and tending to fog more readily, regenerated cellulose films of low water-vapor permeability show more wrinkling and puckering on tomato packages than those of higher permeability. This is illustrated by Fig. 3.

Packages shown in Fig. 3 were given alternate 24-hr. exposures to 72 deg. F., 80% R. H. and 40 deg. F., 60% R. H. for a total period of 10 days before the photograph was taken. The 300 MST showed the most wrinkling and puckering, while the 300 LST and 100 cellulose acetate-2 were much better.

Quality control

Obviously the continued acceptance of packaged tomatoes depends on strict control over the quality of the tomatoes that go into the packages. There have been some evidences of lax control over this quality, as shown by a recent article in *Super Market Merchandising* on "Pre-Packed Tomatoes" (6).

Assurance of top-quality tomatoes going into the packages depends on a number of factors:

1. **Variety of tomato.** Use that best suited for handling and ripening off the vine. Consult with U. S. Department of Agriculture and state agricultural agencies.

2. **Mature tomatoes.** Pick only mature tomatoes that will ripen satisfactorily.

3. **Transportation.** Do not expose to temperatures below 50 deg. F. or above 80 deg. F. Prevent bruising. Maintain normal atmospheres—oxygen above 19%, carbon dioxide below 2%.

4. **Ripening.** Preferred temperature 60 to 70 deg. F., relative humidity 80 to (Continued on page 180)

Testing wax-seal strength*

A LABORATORY METHOD THAT CORRELATES WITH COMMERCIAL RESULTS

GIVES EVALUATIONS WITHIN ACCURACY OF 5%. By C. S. Funk,[†] H. D. Davis,[‡]

J. E. Hanson** and J. R. Segesser**

Every year a large quantity of waxed paper is used in wrappers for food products to protect foods against changes in moisture content during shipping and storage. Use has been made of the thermoplastic property of the wax coatings on these papers to provide heat-sealed closures on the packages. Typical examples are waxed bread wrappers and waxed carton overwraps. Automatic packaging machinery has come into common use for the application of these wrappers to the bread loaves or to the cartons. The heat seals are commonly made by passing the wrapped package first between heated plates and then between cooled plates, and applying pressure during both heating and cooling periods.

In order to be certain that a sufficiently strong heat-sealed closure will be provided by the waxed wrapper, it is necessary to be able to measure the sealing ability of the wax used, to

compare waxes available from different sources and to select a wax that can be counted on to meet the requirements of the particular wrapper.

Some indication of the heat-sealing ability of the wax can be obtained from measurement of its tensile strength. In general, in comparing paraffin waxes of similar melting point, it can safely be assumed that the wax with the highest tensile strength will possess the greatest sealing strength. Such an assumption is not considered correct, however, if waxes of different melting point or different composition are being compared.

A method of determining directly the heat-sealing ability (sealing strength) of the waxes obviously is desirable for making such comparisons.

One method for sealing-strength determinations has been briefly described by E. I. du Pont de Nemours & Co. (1).¹

This method of sealing requires passing a roller over strips of waxed paper placed on a heated surface. The type of machine used to test the

seal was not described. Padgett (2) recognized the importance of sealing strength and referred briefly to a test method.² Other authors have mentioned sealing strength without presenting a complete method of evaluating it.

This paper describes a laboratory method of applying uniform films of paraffin wax to paper, sealing the waxed sides of the paper together between hot glass plates and measuring the force required to separate the heat-sealed papers.

Apparatus

A supply of unwaxed opaque bread-wrap paper, preferably in roll form, 5 in. wide. The paper used in this series of tests was M.G. coated opaque sulfite bread-wrap weighing 25.5 lbs. per ream (24 by 36 in., 500 count).

Glassine paper, 24.0 lbs. per ream (24 by 36 in., 500 count).

Five steel disks, 7 in. in diameter, 1.25 in. thick, weighing 14 lbs., hav-

* From the article "Determination of Sealing Strength of Paraffin Wax," in the January, 1950, issue of *Analytical Chemistry*. Reprinted by permission.

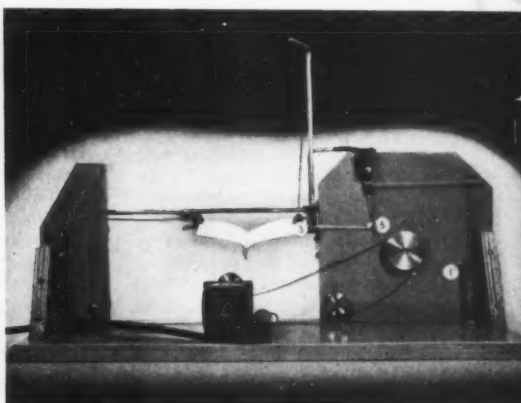
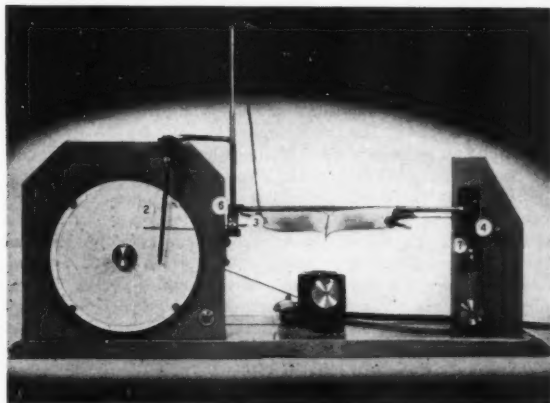
[†] Of the Western Waxed Paper Co., San Leandro, Calif.

[‡] Of the California Research Corp., Richmond, Calif.

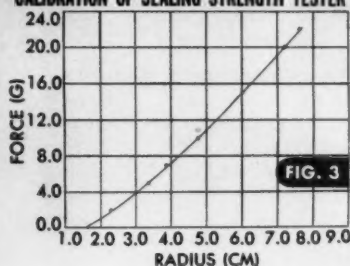
¹ Numbers in parentheses identify "Literature Cited," appended.

² A suggested Packaging Institute Standard Test Method for heat-sealing strengths and characteristics was presented in *MODERN PACKAGING*, Sept. '46, pp. 150-51, 180, 182.

1 and 2. SEAL-STRENGTH TESTER, front and rear views. The numbers identify parts used in calibrating or adjusting instrument, which are explained in the text on page 128 under the heading, "Adjusting Sealing-Strength Tester."



CALIBRATION OF SEALING STRENGTH TESTER



ing one face flat and polished and the other fitted with a handle.

Five steel disks, 7 in. in diameter, 0.625 in. thick and having one face flat and polished.

Disks of blotter paper 7 in. in diameter.

Oven, controlled to ± 2 deg. F. at 200 deg. F.

Five glass plates, 0.25 by 4 by 4 in.

Five glass plates, 0.25 by 5 by 5 in.

Two glass trays, 2 by 6 by 10 in. for waxing paper.

Two racks for suspending waxed paper.

Paper cutter or sharp scissors.

Sealing strength tester (Figs. 1 and 2).

American recording chart No. FO-150-8.

Planimeter for measuring the area within an irregular closed line.

Calibration and procedure

Adjusting sealing-strength tester. The following parts in Figs. 1 and 2 are referred to when calibrating or adjusting the instrument:

1. Setscrew to adjust spring tension
2. Pen arm
3. Clip
4. Pulley
5. Adjustable lever arm
6. Setscrew
7. Setscrew

Normal use of the sealing-strength tester requires the adjustment of setscrew 1 and pen arm 2. Setscrew 1 is adjusted until it just touches the spring, then pressure is increased by turning clockwise for three-fourths of a turn. The pen arm is moved until it is about 0.25 in. from the zero circle of the recording chart and final adjustment is made to the zero circle with setscrew 1. Static friction is overcome by gently tapping the in-

strument after each adjustment of the setscrew.

Calibrating sealing-strength tester. The calibration is checked by suspending a 10-gram weight over pulley 4 by means of a small string or thread that is attached to clip 3. The instrument is tapped near the recording pen and near pulley 4 at the same time until a constant reading is obtained. The instrument was calibrated with a 10-gram weight for a deflection of 75 units on American recording chart No. FO-150-8. This value should be checked each day the instrument is used.

In order to calibrate the instrument a 10-gram weight is suspended over pulley 4 as described above. The deflection of the pen is adjusted to 75 by changing the length of lever arm 5. When the levels of setscrews on lever arm 5 are changed, clamp 3 (unloaded) is adjusted to the same height above the base by means of setscrews 6 and 7. These two setscrews allow the entire assembly between 6 and 7 to be moved vertically.

After a deflection of 75 units is obtained with a 10-gram weight, the instrument is calibrated with weights of 1 to 20 grams, using the procedure required for checking the calibration. Fig. 3 is a plot of the deflection radius against force in grams.

Procedure. Eight 18-in. strips cut successfully from a stub roll of bread-wrap paper are arranged in such a manner that the first, third, fifth and seventh sheets are used with the wax to be tested. The alternate sheets are used with the standard wax. Alternate sheets are used in this manner to minimize the variations which normally might occur in the test paper. The test sample of wax is placed in a 6 by 10 in. tray and heated to 175 to 185 deg. F. The paper is waxed on the glossy face only by passing over the surface of the molten wax. With practice the paper strips can be passed over the wax surface without running wax onto the back of the paper. The waxed paper strips are suspended from a rack to permit draining of wax across the paper while in the oven. The strips are then placed for 10 min. in an oven set at 200 deg. F. After oven treating, the strips of waxed paper are stacked with the glossy face up and cut into 5-in. sections. These sections are then cut to approximately 4 by 5 in. pieces with the 5-in. edge in the machine direction of the roll. The same procedure is used to prepare

paper waxed with the standard wax.

Precautions. Wax should not be scraped off on the tray edge when the paper is waxed.

During oven treating care should be exercised to prevent the paper from touching the oven sides or sticking to itself, as this will result in erratic sealing-strength values.

The tests should be completed within 1 hr. after oven treating.

Sealing test

Two 4- by 5-in. sheets of waxed paper are placed with their glossy waxed sides together between two sheets of glassine paper. This waxed paper sandwich is placed between two glass plates preheated to 195 to 205 deg. F. The bottom 5-by-5-in. glass plate rests on a 7-in.-diameter steel disk and the top 4-by-4-in. glass plate is pressed down with a 14-lb., 7-in.-diameter steel disk. The glass plates are insulated from the steel disks with blotter paper. After five minutes, the sealed sheets of waxed paper are removed and cut to exactly 3.5 by 4 in., making sure that all edges are trimmed. The 4-in. dimension is in the machine direction of the paper.

Before the laminated sheets are attached to the sealing-strength tester, the pen arm is adjusted to zero on the recording chart. The sealed sheets are peeled apart about 0.5 in. across the 3.5-in. dimension and the resulting ends are attached to the clips on the horizontal bar. The motor is started and pulls the ends of the sealed sheets apart at the rate of 21 in. per minute. A record of the force required to separate the sheets is made on the recording chart. Strip width can be altered when necessary to eliminate extremely large or small deflections of the pen arm.

Calculations

The line inscribed by the recording pen is somewhat irregular in shape, as illustrated in Fig. 4. To determine the average radius, a semicircular section is selected that excludes the first and last sections of the recorded curve. It is generally preferable to select a section that starts just after full load is applied.

An average radius of the sealing-strength curve is calculated from the planimetric area of the semicircle. A mean radius is calculated for five determinations, discarding all values $\pm 5\%$ from this value and recalculat-

ing the mean. Five similar determinations are made using the standard wax.

Total force is obtained from the calibration curve and converted to grams per inch.

The sealing strength of the standard wax was established by averaging values obtained from 60 determinations. A correction is applied to the sealing strength of the test sample by means of the following equation:

$$S = \frac{A}{a} \times B$$

where S = corrected sealing strength of sample, A = standard sealing strength value of standard wax, a = measured sealing strength of standard wax and B = measured sealing strength of test sample.

Experimental

Using the sealing test procedure described above, systematic changes were made at different important steps in the procedure to determine the variation in sealing strength. To eliminate changes due to the paper, a control run was made with paper from the same section of the roll. The refined paraffin wax used in all tests had a melting point of 147 deg. F. AMP. A sealing strength of 2.6 grams per in. was established as the average of 60 determinations.

For all tests one factor was varied while the remaining conditions were the same as those used for the control.

It can be seen from Table I that an oven temperature of about 200 deg. F. is required to drain the excess wax. At this temperature about 7 min. are required for the wax in the paper to reach a constant level.

TABLE I—OVEN TREATMENT AT VARIOUS TEMPERATURES AND TIMES

Lab. temp., °F.	Oven temp., °F.	Oven time, min.	Wax on paper, lb./ream*	Sealing strength, grams/in.
75	160	5	17.2	3.7
75	160	10	13.1	3.4
76	180	5	13.1	3.1
75	180	10	..	2.9
72	200	2	13.1	3.0
83	200	5	11.6	2.7
82	200	7	10.1	2.6
77	200	10	10.3	2.6

* After oven treating.

Fig. 5 illustrates the relationship between sealing strength and wax thickness on the test strips. The increase

of sealing strength with an increase of wax thickness can be primarily attributed to the instrument characteristic of measuring paper stiffness as sealing strength. Near 10 lbs. of wax per ream the sealing strength remains fairly constant at 2.6 grams per in.

Sealing strength was not changed significantly when the bread-wrap paper was waxed at different temperatures, as shown in Table II.

TABLE II—VARIABLE WAXING TEMPERATURES

Lab. temp., °F.	Waxing temp., °F.	Wax on paper, lb./ream	Sealing strength, grams/in.
77	160	9.8	2.6
76	190	10.3	2.6
78	210	9.9	2.7

The effect of aging time after oven treating and before sealing was determined at 10 min., 2 hrs. and 24 hrs. As shown in Table III, the sealing strength changes very slowly on aging.

TABLE III—EFFECT OF AGING TIME

Aging time hrs.	Aging temp., °F.	Sealing strength, grams/in.
10 min.	77	2.6
2	77	2.7
24	77	2.8

In order to evaluate the effect of humidity on sealing strength, unwaxed bread-wrap paper was stored at constant humidities for 24 hrs. Table IV indicates that sealing strength remained constant at 2.6 grams per in. up to 81% relative humidity. At 100% relative humidity the sealing strength increased to 3.4 grams per in. This increase was probably due to the moist condition of the paper. Moderate changes in laboratory humidity from day to day should not materially alter sealing-strength values.

TABLE IV—CONDITIONING PAPER BEFORE WAXING

Relative humidity, %	Storage time, hrs.	Sealing strength, grams/in.
Anhydrous	24	2.6
45	24	2.6
81	24	2.6
100	24	3.4

The effect of sealing temperature on sealing strength is shown in Table V. The measured sealing strength increases with an increase in sealing

SEALING STRENGTH TRACE

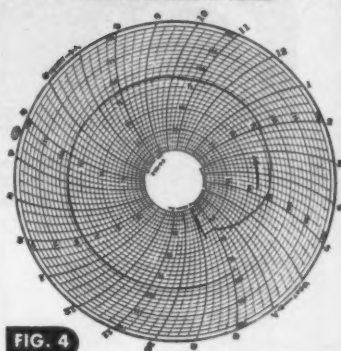


FIG. 4

temperature. The tests run at higher temperatures indicated no advantage over those run at 200 deg. F. Experimentally, it is easier to work at the lower temperature.

TABLE V—VARIABLE SEALING TEMPERATURE

Initial temp., glass plates, °F.	Sealing strength, grams/in.
200	2.6
250	2.8
300	3.3

TABLE VI—EFFECT OF PAPER VARIATIONS

Stub roll	Sealing strength, grams/in.
1	3.1
2	2.9
3	3.1
4	2.5
5	2.5
6	2.8

Table VI demonstrates the change in sealing strength caused by variations in the paper. These variations can be corrected by the use of a control run (Continued on page 182)

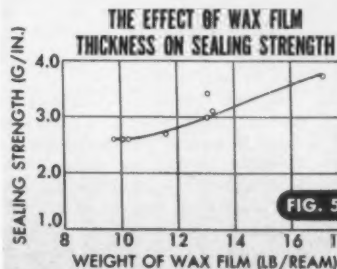


FIG. 5

Questions & Answers

This consultation service on packaging subjects is at your command. Simply address your questions to Technical Editor, Modern Packaging, 122 East 42nd St., New York 17, N. Y. Your name or other identification will not appear with any published answer.

Waterproof textile pack

QUESTION: We put up a special package of cheese cloth for certain Government uses under a specification that requires a waterproof package. At present, we are using a heavy grade of kraft paper laminated to aluminum foil made up into a flat bag by heat sealing. We form the bag, insert the cheese cloth and heat seal the top. We would like to find a lower-cost, stronger package, or a packaging material that would simplify our production problems.

ANSWER: A product such as cheese cloth will require a very strong, tough package and packaging material, particularly if it is to meet the waterproof specification. Polyethylene film would seem to meet your requirements and has been used with some success for textile packaging because of its durability. The thickness of the polyethylene film you use will depend upon the size of the unit you wish to pack. You could probably start with 1 1/2-mil film and go from there up to a 4- or 5-mil thickness. The polyethylene could be in the form of an extruded tube heat sealed across the bottom, or a conventional flat bag made from sheeting. Cheese cloth can be quickly inserted by a form or jig without shaping up the bag and the filled unit can be heat sealed by any one of the many sealers suitable for polyethylene. There are many such heat sealers and it is suggested that you refer to the article, "Sealing of Polyethylene," MODERN PACKAGING, Dec., 1949, p. 133, for further details.

In some step of the packaging operation, before sealing, the package should be pressed to eliminate as much air as possible and any label or identification should be inserted in the bag.

A variety of samples of different gauges of polyethylene and, perhaps, different bag constructions should be submitted to the Government agencies

you will be supplying, to see which sample satisfies their requirements. There should be no difficulty on this score; however, since polyethylene bags have been approved as waterproof barriers under Government Specification JAN-P 117, Type III, Grade A, Class b.

Testing heat-seal strength

QUESTION: We are trying to compare the heat-sealing strength of various types of coatings for paper. So far, the results are very erratic and appear to have little relationship to the amount of coating used. We are using a standard tensile machine in a temperature- and humidity-controlled room. The samples are prepared on a heat sealer with automatic control of time, pressure and temperature. The seal is overlapped, cut to 1-in. width, conditioned for 24 hrs. and then tested. Do you have any suggestions?

ANSWER: It would appear that you have recognized and put under control all of the variables for the evaluation of heat-sealing coatings on paper. It is presumed that you have the necessary application means to procure samples with smooth, uniform coatings on various papers. However, the manner in which you are pulling the seal, with loading in shear, is one which will not give the results you want. The pulling of overlap seals in this manner will not show differences in coating weight after a good seal has once been made. Also, coatings which are soft and flexible will show erratic behavior. The best answer to your question is found in the "Packaging Institute Proposed Standard Test Methods—No. 3 For Heat-Sealing Strengths and Characteristics" (See MODERN PACKAGING, Sept., 1946, p. 150). This test method specifies that the seals shall be pulled

in a peeling manner which has been found to show up the difference in coating weights and types, as well as the effects of changes in sealing conditions.

Shipping jars by parcel post

QUESTION: We are starting production of a liquid product contained in 12-oz. glass jars and will make extensive use of parcel post for shipment. We are anxious to know whether there are any special rules to be observed in packaging for parcel post.

ANSWER: You can obtain considerable information on how to pack your product properly for parcel post shipment by examining a copy of the Postal Guide at any post office. The following paragraphs, quoted from the Guide, are pertinent: "In general, if the liquid content (of glass containers) is not over 16 oz., absorbent material such as creped cellulose or wood fibre felt wadding, absorbent cotton, sawdust, bran, or the like (but not excelsior) should be used to take up the liquid in case of breakage as well as to act as a cushioning agent, and the mailing carton should be securely sealed....

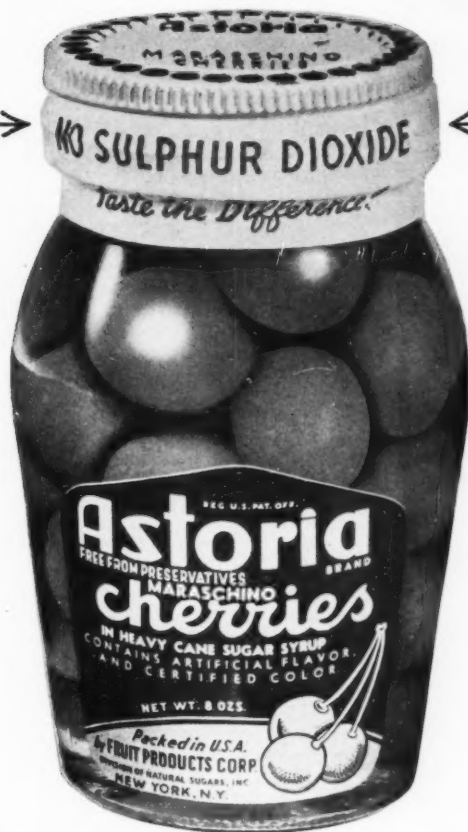
"All parcels containing articles easily broken are required to be marked 'Fragile.' Among such articles are . . . articles consisting wholly or in part of glass or contained in glass, which must be securely packed in strong boxes of wood, metal, or fibreboard and surrounded with ample cushioning material such as excelsior, shredded or crushed paper, creped cellulose wadding or padding or the like, or other equivalent cushioning, to prevent appreciable movement and to prevent breakage from contact with the inner wall of the outside box or with other articles in the same container."

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Make your product stand out on display . . . with a colorful "Cel-O-Seal" cellulose band, indelibly printed with your sales message. We'll be glad to help you design a distinctive, sales-building band for your product. Just write "Cel-O-Seal" Division, E. I. du Pont de Nemours & Co. (Inc.), 2522-A Nemours Bldg., Wilmington 98, Del. "Cel-O-Seal" bands are also sold by Armstrong Cork Co., Lancaster, Pa., and I. F. Schnier Co., San Francisco, Cal.

DU PONT "CEL-O-SEAL" BANDS



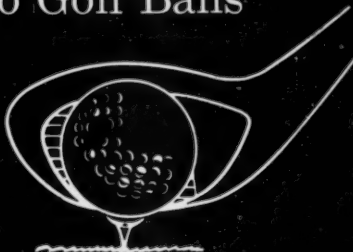
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	Tobey Fine Papers, Inc.
St. Paul, Minn.	Inter-City Paper Co.
San Bernardino, Calif.	Blake, Moffitt & Towne
Salt Lake City, Utah	Western Newspaper Union
San Diego, Calif.	Blake, Moffitt & Towne
San Francisco, Calif.	Blake, Moffitt & Towne
San Jose, Calif.	Blake, Moffitt & Towne
Seattle, Wash.	Blake, Moffitt & Towne
Sioux City, Iowa	Western Newspaper Union
Spokane, Wash.	Blake, Moffitt & Towne
Springfield, Mass.	Bulkley, Duntun & Co., Inc.
	(Div. of Carter, Rice & Co. Corp.)
	Mill Brand Papers, Inc.
Stockton, Calif.	Blake, Moffitt & Towne
Tacoma, Wash.	Blake, Moffitt & Towne
Tampa, Fla.	Tampa Paper Co.
Toledo, Ohio	Paper Merchants, Inc.
Tucson, Ariz.	Blake, Moffitt & Towne
Washington, D. C.	The Mudge Paper Co.
Worcester, Mass.	C. A. Eady Paper Co.
	(Div. of Carter, Rice & Co. Corp.)



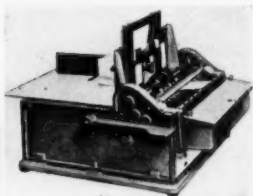
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Equipment and Materials

HAND LABELING MACHINE

Companies whose packaging operations include hand labeling will be interested in the new Auto-Feed labeler made by Nelson Label Machine Corp., 59 Edison Place, Newark, N. J. Available



in three sizes, for labels 1 to 3 in. wide, 2 1/4 in. long; 2 1/2 to 7 in. wide and 5 to 10 in. wide, it feeds labels automatically from a stack. Two unskilled persons can operate the machine as a team, working at top speed. By tapping one of the two trigger-action levers, one label at a time is fed through by the

friction feed mechanism, "metered" with the desired amount of glue. Adjustments are provided for label thickness and amount of glue applied. The machine may be stripped for cleaning and re-assembled without the use of tools, the company claims, and all its parts are corrosion resistant. The Nelson company is offering a 10-day free trial offer of the machine in order that users may ascertain its adaptability to their own hand-labeling problems.

MULTIWALL BAG-MAKING MACHINE

Potdevin Machine Co., Brooklyn, N. Y., has introduced a machine for making siftproof multiwall specialty bags with self-opening square bottoms which incorporates many interesting patented features. Especially noteworthy is the double differential compensator and electric-eye scanner for automatically locating a preprinted design in relation to the cut-off. This Model 84 IRA is said to be extremely versatile in that it can produce single-, double- or triple-wall self-opening square bags in 10- to 25-lb. sizes at the rate of 150 to 200 per minute. Incorporated in the machine is a four- or six-hole adjustable punching mechanism for use on potato bags; staggered bottom slitting and/or slitting in the tube; code number printer; Farval "one-shot" lubrication system; lay shaft drives to cross posters and web slitters.

SEAMLESS CORRUGATED SHIPPING CONTAINER

The accompanying photograph shows the unique Liner-Joint seamless shipping container made by David Weber Co., 3500 Richmond St., Philadelphia, Pa., as used by the Lowry Coffee Co. of that city. The manufacturer's joint, commonly used for ordinary containers, has been replaced by a patented mortised construction in the Liner-Joint.



This permits end-to-end meeting of the corrugated flutes and utilizes the tough fibre liner stock to lock the seam inside and outside, providing double strength and security, it is claimed. Through the elimination of tape, stitches and overlap, a smooth, unbroken surface

is presented on all four sides of the case, inside and outside, which allows continuous printing as shown in the Tartan container. In addition, this seamless container is said to be easier and safer to pack and handle because there are no stitches to

snag labels or injure hands. The horizontal corrugations make this container ideally suited for the shipment of canned goods, the end-to-end and side-to-side compression strength provided by the container, with the cans themselves offering the needed top-to-bottom load strength. Another advantage offered by these containers is that, having no overlap, they may be stacked more evenly and higher, saving valuable floor space in the storage of the folded cases. In price they are said to be comparable to ordinary joint containers.

SOAP-WRAPPING MACHINES

Houchin Machinery Co., Hawthorne, N. J., manufacturer of soap-making machinery, has secured the exclusive world-wide distribution rights for the Van Buren automatic soap-wrapping and cutting machines made by the Van Buren Machine Works. Heretofore these machines were built by Van Buren for the exclusive use of one of the largest soap manufacturers, where they have been thoroughly proved under continuous mass-production conditions for many years. The Houchin Machinery Co. reports it expects to double its capacity during early 1950.

MAGNETIC COUNTER

A small, light-weight precision counter, produced by Abrams Instrument Corp., Lansing, Mich., has additive or subtractive



wheels which record 1,200 counts per minute. Measuring only 1 in. high and less than 2 in. deep, and weighing 2 oz., the unit is particularly adaptable wherever space limitations are present. Figures are either white or fluorescent on black. Actuated electromagnetically, this counter can be connected in a vacuum-tube circuit, or can be operated by any contacting device. Because a wide variety of mounting methods is possible, units are available either with or

without the die-cast case. A snap door on the front of the case permits the counter to be reset without disturbing the mounting.

COLOR PRINTS FIBRE, PAPER OR PLASTIC CANS

Direct color labeling, imprinting and/or coding of spiral and convolute cans and tubes of fibre, paper or plastic in one-, two- and four-color designs at less than the cost of a plain paper label is achieved by the use of the Kolopac machine, according to its manufacturers, Paperless Labellers, Inc. The average cost of labeling a four-color design on a can or tube is reported to be eight cents per gross.

According to the company, their Kologlaze colors do not require infra-red lamps or other types of drying equipment. They are said to be surface dry as soon as they leave the machine and do not offset or smear, so that cans or tubes may be crimped, stacked or packed as they leave the machine.

The labeling operation is automatically synchronized. Cans or tubes are fed into the machines by means of a chute and singly carried into holders which revolve them during the printing operation. The printed can or tube is then discharged from the holders and deposited into a discharge chute. Each

Cut Cartoning Costs

**BY INCREASING OPERATOR OUTPUT
480% TO 1500%**

with the NEW JONES "CMV" cartoner

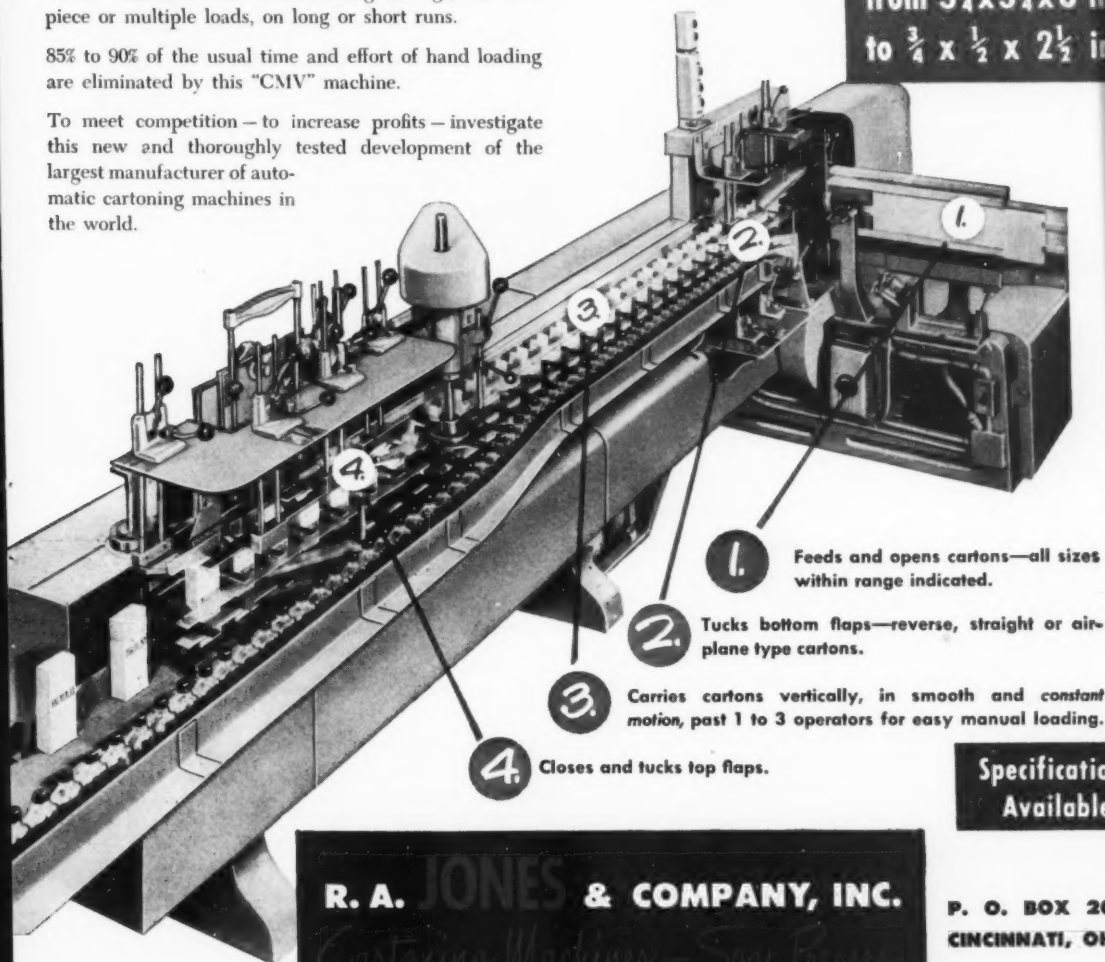
Even at speeds well below capacity, the new JONES "CMV" Cartoner makes astonishing savings, on one-piece or multiple loads, on long or short runs.

85% to 90% of the usual time and effort of hand loading are eliminated by this "CMV" machine.

To meet competition—to increase profits—investigate this new and thoroughly tested development of the largest manufacturer of automatic cartoning machines in the world.

**QUICKLY ADJUSTABLE to
pre-calibrated settings for
ALL CARTON SIZES**

from $3\frac{1}{4} \times 3\frac{1}{4} \times 8$ in.
to $\frac{3}{4} \times \frac{1}{2} \times 2\frac{1}{2}$ in.



1. Feeds and opens cartons—all sizes within range indicated.

2. Tucks bottom flaps—reverse, straight or air-plane type cartons.

3. Carries cartons vertically, in smooth and constant motion, past 1 to 3 operators for easy manual loading.

4. Closes and tucks top flaps.

**Specifications
Available**

R. A. JONES & COMPANY, INC.

Cartoning Machines—Soap Boxes

**P. O. BOX 2055
CINCINNATI, OHIO**

**quality.....
service....**

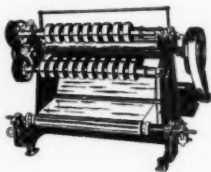
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38 years

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OF OUR RECORD

Years of experience will help us give you the
best in **SERVICE** and **QUALITY** for the
future.

OLIVE CAN CO.

450 N. LEAVITT ST.
CHICAGO 12, ILLINOIS



1950

BECK
RAZOR BLADE

SLITTER and REWINDER

rolls up Packaging Profits

Production-conscious, cost-conscious package makers and package material processors roll up profits when they're Beck-conscious. The 1950 Beck Slitter and Rewinder booms production... it's easily set up, slits fast and accurately, rewinds uniformly with correct tightness. Here's a machine to fight rising cost curves... first cost is low, quickly changed razor blades are replaced inexpensively. If you need narrow rolls of lightweight materials, you need Beck. Send envelope-size material samples and we'll show you why.

CHARLES BECK MACHINE CORPORATION
406 N. 13th Street Philadelphia 8, Pa.

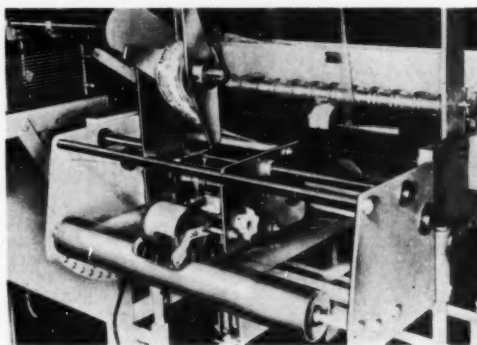
Equipment and Materials

unit acts simultaneously at a speed of from 60 to 120 per minute. The discharge chute can be attached to a casing machine, or the tubes or cans can be delivered direct to a crimping machine.

The company is also offering a machine for printing tapes, in one or two colors, in widths from 1 to 8 in., at an average speed of from 8,000 to 10,000 ft. per hour. The tape is printed as it is unwound from the roll and then rewound in one continuous operation. Inquiries may be directed to Paperless Labellers, 306 Marquette Bldg., Detroit 26, Mich.

ROLL LABEL ATTACHMENT AND LABEL IMPRINTER

For use on their Model MPS wrapping machine, Miller Wrapping & Sealing Machine Co., 18 S. Clinton St., Chicago, Ill., is introducing an automatic roll labeling attachment and label imprinter (illustrated) which should prove interesting to food



packers as well as self-service stores that pre-package such items as meat, poultry, fish, cheese and produce. The attachment is designed to handle thermoplastic-coated labels in rolls, indexing each label accurately on the wrapper by means of a simple mechanism. This attachment makes possible the heat sealing of the label directly onto the wrapper before it is brought around the package, so that contents are not subjected to heat at the point where the label is applied. Labels up to 3 by 4 in. in size can be applied by this device.

As an adjunct to the labeler, an automatic label-imprinting device has been developed for varying such information as weight, price, product identity, etc., on the label.

The Corley-Miller conveyor with variable speed drive is another new development recently announced by this company. This conveyor is said to be particularly advantageous where a specific rate of package travel is desired to coordinate package movement with the speed of machines for processing, packaging and handling operations. Its special construction features include: tubular package guide rails; knob adjustment locks for positioning height and spacing between package guide rails; driving parts confined to a minimum space so as to allow maximum unobstructed clearance below the conveyor bed and provision for up to 10-in. slack take-up on the conveyor belt.

STOCK SIZES OF ETHYL CELLULOSE TUBES

"Hy Lus Cel" plastic tubes, made from a special formulation of ethyl cellulose, are available from stock in 6-in. length with a wall thickness of 0.014 in. in a wide range of colors. These are extruded in transparent, translucent or opaque form by Hydrawlik Co., 131 E. First Ave., Roselle, N. J., who recommend their use for the packaging of a variety of products, claiming the tubes to be inert when used to house metal inserts,



making things *Crystal* clear!

"Good things come in good packages"—that's the smart, modern version on a wise old saying. And Crystal Tube really makes "good packages." There's a certain sparkle to a product in a Crystal Tube package—a certain bright lift to the design—an easy readability—features that make sure that "eye appeal" is also "buy appeal."

The Crystal Tube representative will be happy to offer suggestions to see that you get just the right combination of these properties to answer your packaging problem. Call or write us today. You'll find that your "good things" can sell better when helped along by Crystal Tube packaging.



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538 SOUTH WELLS STREET, CHICAGO 7, ILLINOIS • DEPT. MP-2
 Branch Offices in New York, Philadelphia, St. Louis, Minneapolis, Detroit, Louisville and Dallas
 Plain and printed CELLOPHANE BAGS, ENVELOPES, TUBES, POUCHES • Printed CELLOPHANE, FOIL and GLASSINE ROLLS
 and SHEETS • Holiday BANDS • CELLOPHANE and PLIOFILM Utility ROLLS • PLIOFILM and POLYETHYLENE BAGS
 • Rigid ACETATE CONTAINERS

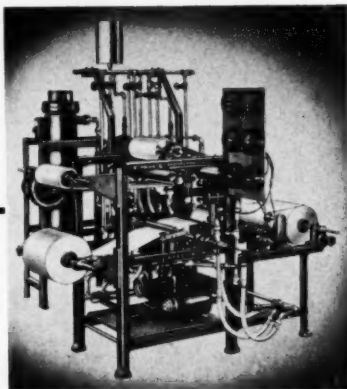
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**A Complete Service
All Under One Roof and
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- Cylinder Engraving
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Complete plants for the manufacture of
**CARBON PAPER, TYPEWRITER
RIBBONS, DRY STENCILS, ETC.**
**HOT MELT COATING AND
LAMINATING MACHINES**

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34-11 VERNON BLDG., LONG ISLAND CITY 6, N. Y.

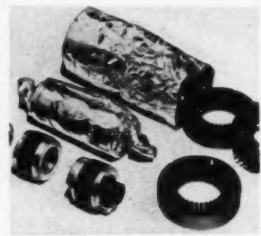
Equipment and Materials

(Continued)

as well as being resistant to sunlight and strong alkalies. The tubes, sealed or crimped on one end, won't roll and may be closed by means of a cork or the company's patented plastic closure. Special sizes are available on order and imprinting can be furnished if desired.

SELF-SEALING WRAPPING MATERIAL

Standard Insulation Co. announce they are in commercial production on a moldable-type, corrosion-free wrapping material which is said to provide vapor-tight packaging for new and spare parts. Designated as Stanwrap #40, this wrapping material



consists of aluminum foil laminated to the reverse side of Saran-resin coated-kraft paper. The manufacturer claims that units or parts wrapped in this material will remain rust- and corrosion-free for indeterminate periods of time. In addition to its waterproofness, the material is reported to be highly scuffproof and resistant to oils, greases, mild alkalies and acids.

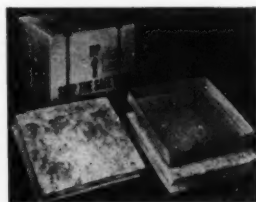
Due to its dead-fold characteristics, a vapor-tight package can be obtained, it is claimed, by merely using a drug-store fold and twisting the ends of the wrapping, as shown in the photograph, with no waxes, tapes or heat necessary. The Saran coating used eliminates the need of an extra inner wrap and sets up a barrier between the chemicals in the paper itself—thus eliminating any loose paper fibre that might contaminate the wrapped part—and the article packaged.

The company reports extensive laboratory tests show the material as having high tensile and tear strengths. Specific tests were made for corrosion resistance using SAE 1020 steel bars wrapped with drug-store fold and twisted ends and no corrosive effects showed after 100 hrs. at 100 deg. F. and 95% relative humidity. Tests were made with both foil and paper side out. Available for immediate delivery, it can be furnished in continuous rolls up to 36 in. wide, or in sheets up to 36 in. wide and 50 in. long. Inquiries should be sent to Robert Metzler at Standard Insulator Co., 74 Paterson Ave., East Rutherford, N. J.

SHIPPING CONTAINER FOR PERISHABLES

Little America Frozen Foods, Inc., Pittsburgh, Pa., is offering its Vacuumatic shipper, said to be the first low-cost container wherein temperatures can be controlled, for foods and other perishable items. The container is a double carton with a 550-lb. test and includes insulation corrugated pads, 1-in. insulation spun glass and a dry-ice chamber. Control of temperature is achieved, it is claimed, by the proper wrapping of the dry ice. For use with this container, a special pallet has been developed which not only permits easy handling, but aids in keeping the container dry. The container weighs about 10

lbs., will hold approximately 150 lbs. and it may be re-used several times, further cutting shipping expenses. The company claims it has been used successfully for shipments of perishables from Pittsburgh to California, Texas, London and even by air express to the Middle



MODERN PACKAGING



Kimble Opticlear Vials come in eight popular sizes

Quality package for quality products — KIMBLE OPTICLEAR VIALS

To give your product a clear look of distinction, package it in Kimble Opticlear Vials. They add a distinct appearance of quality and dignity. They show it in sparkling glass that's clear

as crystal and topped with a new resilient translucent stopper. This stopper keeps the contents safe from moisture. And even continued re-use does not impair its seal-in effectiveness.

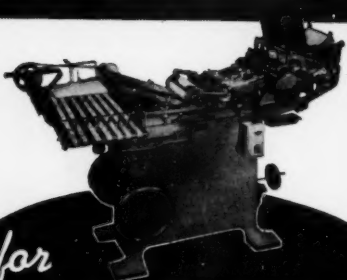
Opticlear Vials spur sales. You'll see why the moment you look at them. Wouldn't you like samples? We'll send them along if you'll write the sizes your product requires.

Specify Kimble for Assurance of Container Quality

KIMBLE GLASS TOLEDO 1, OHIO

Division of Owens-Illinois Glass Company






for
**IMPRINTING
CODING**

THE MULTIPRESS

Finest high speed small unit made for every type of imprinting on folding cartons, paper products, booklets, labels. 6500 impressions per hour. Ideal for imprinting batch numbers, blockouts, flavors, colors, prices, codes, dates, sizes. MULTIPRESS solves your coding problems!



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52 DUANE STREET, NEW YORK 7, N.Y. BA 7-1466-7

More SALES with WEINMAN Transparent Plastic Containers

Appealingly displayed
products are "sales
attracting" products.



WEINMAN'S "eye-catching" display containers give your products that "added punch" that means more sales and profits for you.

Write for samples, catalogue and packaging suggestions today.



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MANUFACTURERS
3260 W. GRAND AVE., CHICAGO 51

Equipment and Materials

(Continued)

East. Keystone Box Co. of Pittsburgh will produce these containers, on which a patent is pending, for Little America Frozen Foods in any desired size. Booklet giving instructions and additional data may be obtained upon request to the latter company, 36th & Butler Sts., Pittsburgh.

WINDOW BAG FOR BAKED GOODS

A white kraft bag with a window of transparent film is being promoted by Union Bag & Paper Corp., New York, for the sale of baked goods. Known as the "Pek Bag," this flexible container affords the product sanitary protection against dust and handling while permitting the customer to see the product. In retail stores the bag may be used for pre-packaging of merchandise during slack periods, thus not only saving the customer packaging delays and increasing the efficiency of store operation, but aiding in maintaining the product in practically the same condition as when it left the ovens. Bags may be printed in three colors and are available in standard sizes.



REDUCTION IN PRICE OF SQUEEZE BOTTLES

Plax Corporation Div., Hartford-Empire Co., Hartford, Conn., recently announced a further reduction in the prices of their Plaxpak polyethylene bottles in the standard Boston round shape. The reductions are effective for all sizes and will amount to 3% on quantities up to 100,000 and 2% on quantities above that figure. As in the case of the previous price reduction, made last September, the decrease is possible due to manufacturing economies resulting from increased production facilities set up to meet increased demand for these bottles.

TRADE NAME CHANGED

Aluminum Co. of America, Pittsburgh, Pa., announces that henceforth the complete line of aluminum caps and seals produced by its wholly owned subsidiary, Aluminum Seal Co., Inc., Richmond, Ind., will be known as Alcoa closures. Standard and specialty aluminum caps and seals will continue to be marketed through Alcoa's sales offices, as have Alesco seals.

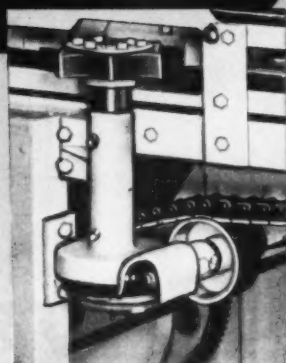
INK FOR PRINTING ON POLYETHYLENE

The Hartford-Empire Co., Hartford, Conn., is now offering, in limited quantities, inks in a complete line of colors for screen and rotogravure printing on polyethylene, both molded and film forms. These inks, which were developed by Seletronic Corp., Montclair, N. J., can be firmly heat bonded to the base material, it is claimed, and thereafter will withstand the adhesive-tape test.

CONTRACT FILLING OF AEROSOL CONTAINERS

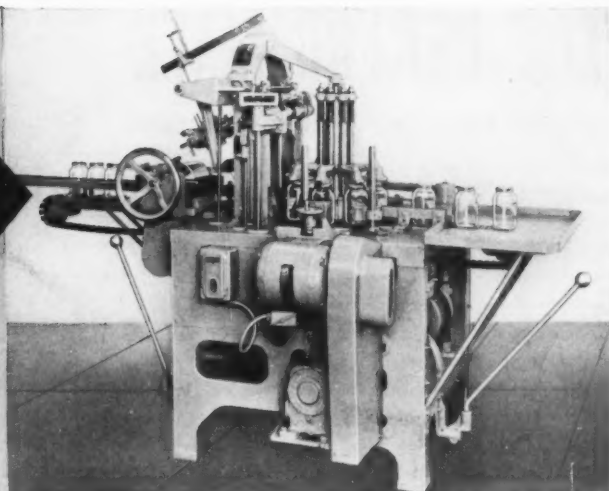
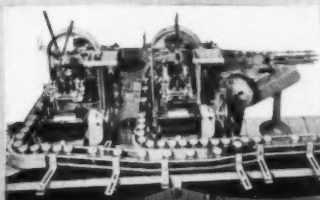
Fluid Chemical Co., Inc., 860 Summer Ave., Newark, N. J., contract packagers of liquid products for over 20 years, announces its entry into contract filling of aerosol containers. Production facilities call for production of over 40,000 cans per day. The production line is being set up to handle Continental and Crown cans, Sun Tube cosmetic-type aluminum cans and any other aerosol-type cans available at the present time. Products to be filled include insecticides, deodorants, paints, cosmetics, fire extinguishers, lacquers, shampoo, etc.

No
"Traffic Jams"



This does it:

Close-up view of the Free-wheeling Starwheel Feed Spacer. However erratic the delivery of containers ahead of the Starwheel, this ingeniously engineered device controls the feed for continuous, precise, profitable labeling. The *free-wheeling* action causes any out-of-position container to get back into line at the right time. The entire action is automatic — avoids jams and breakage — prevents costly delays — makes the WORLD Turret the ideal Labeler for odd-shaped as well as standard containers. Note Starwheel ahead of each infeed on Twin-Turret (below).



— INSTEAD, A CONTINUOUS FLOW OF
LOW-COST QUALITY LABELING WITH

WORLD *famous* TURRET LABELER

Every detail of the WORLD Turret Labeler is carefully engineered to give you the finest in low-cost, trouble-free, top-quality labeling. Examine this synchronizing feed control, for example. With it, semi-automatic or fully automatic feeding of any size, any shape containers is continuous — there can be no costly "traffic jam". It's one reason why you get dependable daily production of 60 to 75 containers per minute on the *Uni-Turret* (above), 120 to 140 per minute on the *Twin-Turret* (left) — all cleanly, precisely dressed up with front body labels, neck labels, or all around neck wraps. New Bulletin tells the whole story. Write for your copy.

"YOU GET THE
BEST LABELERS
IN THE WORLD"

ECONOMIC MACHINERY COMPANY

Builders of World Automatic and Semi-automatic Labelers for Every Purpose

WORCESTER, MASSACHUSETTS

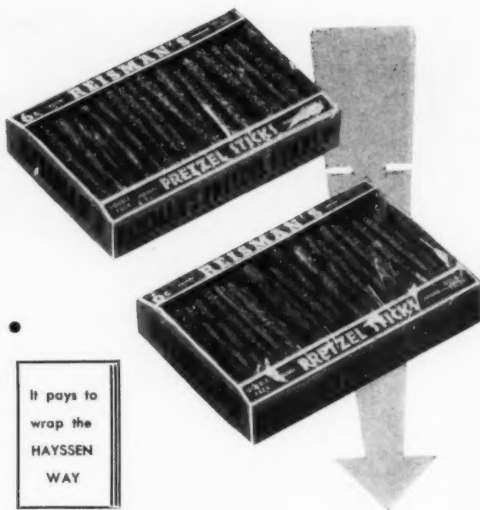
New York Philadelphia Pittsburgh Chicago San Francisco Los Angeles Denver
Louisville Salt Lake City St. Paul Seattle Portland Phoenix London Montreal
Toronto Winnipeg Newfoundland Vancouver Mexico City Sydney Australia
Wellington N.Z. San Juan P.R. Ciudad Juarez D.R. Managua C.R.

TOP PERFORMANCE

WRAPPED EVERY DAY AT LOW UNIT COST

Placing a decorative or plain overwrap around a carton, automatically wrapped on the Hayssen, will do much to lift it out of the commonplace, and make your package more appealing and attractive to the hoped-for purchaser. For eye-catching printed overwraps the Hayssen Electric Eye provides perfect registration, and at the same time keeps the unit cost of wrapping at a low level. The speed of the Hayssen is easily regulated to tie in perfectly with your production line and keep it running smoothly. In fact, the many advantages of using a Hayssen, have been recognized by the ever-increasing number of Hayssen users. For help and suggestions in handling your wrapping, write to the factory today. Hayssen engineers will gladly make recommendations.

HAYSSSEN MFG. COMPANY • SHEBOYGAN, WIS.



It pays to
wrap the
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WAY



Hayssen
ELECTRIC EYE
WRAPPING MACHINES

HAYSSSEN WRAPPING MACHINES COME IN MANY SIZE RANGES, CAPACITIES, SPEEDS

Announcing a new **CUT-OFF**



Send for full particulars

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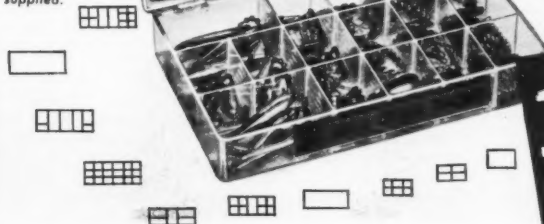
"EVERY BEAD A SWIVEL"



Two boxes of different size and compartment arrangement used by The Bead Chain Mfg. Co., Bridgeport, Connecticut, for packaging its assortments of bead chains.



A few of the many compartment arrangements being supplied.



Every box a merchandiser

PLASTIC BOXES BY VLCHKEK



With "every bead a swivel" The Bead Chain Mfg. Co. prevents kinks in fishing lines, and by packaging in Vlchek Plastic Boxes, also prevents kinks in merchandising.

For these handsome packages display the merchandise to advantage—in preferential display space. Diagrams on inside front covers show the exact compartment for each kind of chain. Every box is a merchandiser.

For shipping, too, the boxes are ideal—provide safe containers all ready to display. Furthermore, they are good items, saleswise, because every fisherman wants one.

These beautiful, crystal-clear plastic boxes are supplied in 8 standard sizes, permitting 548 compartment arrangements. Also specials can be engineered to meet specific needs. Hundreds of companies are increasing sales by thus packaging their products for attractive display and quick selling.

Write for prices, telling us the kind of merchandise to be carried so that we can write you fully.

STANDARD SIZES

10 1/4" - 6.4" - 1 1/4"	7" - 2" - 1"
8 1/4" - 4 1/4" - 1 1/4"	6 1/4" - 4" - 1 1/4"
7 1/4" - 4 1/4" - 1 1/4"	4 1/4" - 2 1/4" - 1"
7" - 3 1/2" - 1 1/4"	4 1/4" - (dia.) - 3/4"



PLASTICS DIVISION
The VLCHKEK TOOL COMPANY
 3001 EAST 87th STREET • CLEVELAND 4, OHIO



Plants and People

The F. B. Redington Co., Chicago, Ill., manufacturer of packaging machinery, announces the recent election of the following new officers: **C. J. Malhiot**, vice president in charge of promotion, and **E. A. Siebert**, vice president in charge of sales. Both Mr. Malhiot and Mr. Siebert have been in the employ of the F. B. Redington Co. for over 30 years.



C. J. Malhiot E. A. Siebert

The plastics division of **Continental Can Co.**, Cambridge, Ohio, has announced the following appointments: **Paul L. Hobbins** has been made a sales engineer in the Cleveland area; **Alfred Kuthe** has been made a sales engineer and will be located in the Central Division office of the company at Chicago; **Henry A. Kazimier** is now a sales engineer in the entire state of Indiana. All will be responsible for the sale of custom molded products, as well as preliminary inquiries concerning laminated sheets, in their respective territories.

Robert S. Hatfield, formerly assistant to the vice president in charge of sales, **Continental Can Co.**, has been appointed district sales manager of the new Milwaukee sales office, located at 735 N. Water St.

In its initial move for expanding its sales force for 1950, **United Board & Carton Corp.**, Syracuse, N. Y., announces the following appointments: **Charles H. Plogman**, formerly sales representative in the Cincinnati area, is now Western regional sales manager with headquarters in the Springfield, Ohio, plant; **Joseph L. Kelly, Jr.**, is now sales representative in the Cincinnati region; **L. E. McClurg** is Southern Ohio and Western Pennsylvania representative.

The foil division of **Reynolds Metals Co.** has organized a new container department headed by **George Du Charme**, formerly can industry manager for the company. His title will be product sales manager of the container department. **Andrew S. Hartanov** has been named assistant product manager of the department and will continue to handle the "Reynolds Pak" program. In addition to "Reynolds Pak," the new department will continue development of aluminum can and foil-lined fibre container business through can manufacturers, as well as the future development of other foil containers of Reynolds manufacture, or products involving the development and sale of forming machines along with Reynolds products. Headquarters of the container department are in Richmond, Va.

H. Lyle Green, recently resigned as president of the J. L. Ferguson Co., is now established as a manufacturer's agent at 185 N. Wabash Ave., Chicago, representing **Battle Creek Bread Wrapping Machine Co.**, Battle Creek, Mich., **A-B-C Packaging Machinery Corp.**, Quincy, Ill., and **Horix Mfg. Co.**, Pittsburgh, Pa.

Robert G. Neubauer, packaging designer of Bridgeport, Conn., will speak on Feb. 15 before the sales managers conference sponsored by the **Advertising & Sales Executives Club**, Montreal, Quebec, on "Packaging from the Merchandising Angle."

H. H. Heinrich and **K. R. Sunderhauf** are jointly operating their respective concerns, **H. H. Heinrich, Inc.**, and **Altair Ma-**

chinery Corp. Mr. Sunderhauf, president of Altair, has been elected vice president of H. H. Heinrich, Inc., and is serving as sales manager for the combine.

E. L. Harley, former vice president and sales manager with H. H. Heinrich, Inc., has formed his own company to market the Opti-Chek plate-mounting machine, which he invented.

The Richard M. Krause Co., Inc., designers, engravers and printers of labels, box wraps and packages, announce the appointment of **John J. Regan** as sales representative for the Metropolitan New York area. Mr. Regan was formerly purchasing agent with the Universal Laboratories.

E. J. Heimer, vice president in charge of the San Francisco office of **Clapp & Poliak, Inc.**, New York exposition management firm, has been elected to the board of directors of the San Francisco Convention and Tourist Bureau.

The Chester Packaging Products Corp. is now located at 284 Nepperhan Ave., Yonkers 2, N. Y.

As a part of a long-range program to expand its activities in the chemical field, **U. S. Rubber Co.** has purchased the chemicals division of **The Glenn L. Martin Co.** U. S. Rubber will acquire all assets of the division, including the Marvinol vinyl resin plant at Painesville, Ohio, laboratory equipment in Baltimore, patents and the Marvinol trade name. The business will become a part of the Naugatuck chemical division of the rubber company. The Painesville plant will continue to make Marvinol vinyl resin for sale to manufacturers of plastic products, with present management at the plant still in charge.

Stuart Peabody of New York has been selected chairman of the Advertising Advisory Committee of the U. S. Department of Commerce. Mr. Peabody is assistant vice president of the Borden Co. in charge of advertising and public relations.

Arthur C. DeAngelis and **Edwin P. Blair** announce the formation of **Via Plastics, Inc.** This new corporation, located at 1510 Sansom St., Philadelphia 2, Pa., has been organized for the promotion and sale of plastic products.

The Gummed Products Co., Troy, Ohio, announces the appointments of **H. B. Conklin** as director of distribution and **Edgar W. Pitt** as sales manager. Mr. Conklin was formerly marketing consultant and president of Louis Dejonge & Co., New York, while Mr. Pitt was vice president in charge of sales and director of the Central Paper Co., Muskegon, Mich.

Walter Jensen, who has been associated with Creamery Package Mfg. Co. for the past 12 years, is now representing the **Morris Paper Mills** in Texas, Louisiana, Arkansas and Oklahoma.

Plax Corp. Div., Hartford-Empire Co., Hartford, Conn., has appointed the **H. Smith Bottle Supply Co.**, Atlanta, Ga., to handle distribution of Plaxpak squeezable, unbreakable polyethylene bottle.

The following personnel changes have been announced in the sales organization of the **Armstrong Cork Co.'s Glass and Closure Div.**: **W. H. Nenstiel**, formerly with the San Francisco district office, has been transferred to Lancaster to serve as administrative assistant to **G. M. Scattergood**, manager, Drug Sundries Dept.; **I. B. Callman**, formerly resident salesman in Washington, D. C., is now in the New York City

Creative Package Design



this corrugated prepak*

Protects...merchandises the product
...displays well...adds color...
prompts impulse purchases...stimulates
take-with sales...saves rewrapping
time, labor and materials...conserves
selling space...serves as storage
box. Goods are sold from floor sample,
delivered from stock to simplify
transaction, minimize handling. To win
dealer enthusiasm and consumer
approval, give **YOUR** products
package action. Consult Hinde & Dauch,
Executive Offices, 5005 Decatur St.,
Sandusky, Ohio.

*Reg. U.S. Pat. Off.

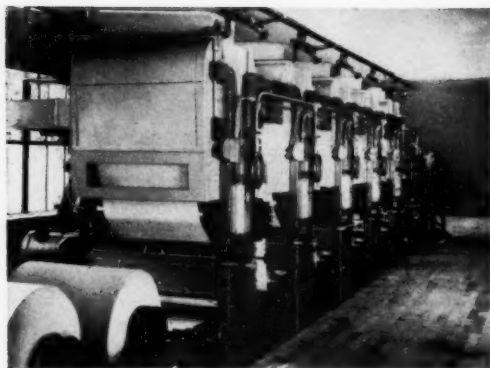
H&D

HINDE & DAUCH
Authority on Packaging

Yours for the asking—CLOSE-UPS OF SUCCESSFUL CORRUGATED BOXES—a pictorial collection of case-histories on profitable merchandising with H & D corrugated boxes. Write for it!



FACTORIES AND SALES OFFICES IN: Baltimore • Buffalo • Chicago • Cleveland • Detroit • Gloucester, N. J. • Hoboken, N. J. • Kansas City, Kan. • Lenox, N. C. • Richmond, Va. • Sandusky, Ohio
St. Louis • Watertown, Mass. SALES OFFICES IN: Akron • Battle Creek • Cincinnati • Columbus • Denver • Erie, Pa. • Fairfield, Conn. • Findlay, Ohio • Greensboro, N. C. • Indianapolis • Miami
Minneapolis • Olean, N. Y. • Omaha • Philadelphia • Pittsburgh • Reading, Pa. • Roanoke, Va. • Rochester • Toledo • Worcester, Mass. IN CANADA, HINDE & DAUCH PAPER CO. OF CANADA, LTD.,
Toronto • Montreal • Chatham • Calgary • Halifax • Hamilton • Kitchener • London • Peterborough • Quebec • Regina • St. John, N. B. • St. John's, Newfoundland • Vancouver • Winnipeg



"ROCKET"

Rotogravure Presses Laminating Machines

Superlative Multicolor Work . . . Minimum
Make-ready . . . High Speed . . . Low Cost

Manufactured by

INTA-ROTO MACHINE CO.

RFD 6, Richmond, Virginia



THE BEST IN

HEAT-SEALING EQUIPMENT

As pioneers and exclusive manufacturers of heat sealing equipment for more than 15 years, the Heat Seal-It Company offers a complete line designed to perform any heat sealing task faster, better and more economically. The Heat Seal-It line offers many exclusive features not available elsewhere. Regardless of what your heat sealing problem may be, write for our catalog for a better solution. No obligation, of course.

WRITE
FOR
CATALOG

HEAT SEAL-IT COMPANY

4316 LANCASTER AVE., PHILADELPHIA 4, PA.



Plants and People

(Continued)

district; A. E. Wells of the Cincinnati office has been transferred to the Chicago district office.

The Dow Chemical Co. announces the appointment of A. R. Tucker, Jr., of the Los Angeles office, as head of Styrofoam sales. Mr. Tucker will assume his new duties at the company's executive offices in Midland, Mich., where he replaces Joseph E. Russell, who has resigned. E. R. Turnquist will be technical sales advisor and work with Mr. Tucker.



In order to allow for future expansion, plans are being made for the construction of a \$3,000,000 office building by the Minnesota Mining & Mfg. Co., St. Paul, Minn. Construction will begin within 60 days and will be ready for partial occupancy by Jan. 1, 1951.

The new structure will be located at Reaney Ave. and Mendota St., adjacent to the present three level administration building.

Another part of the firm's nationwide expansion program is a two-story, block-long manufacturing plant in St. Paul, scheduled for completion next fall and costing more than \$2,000,000.

Stein, Hall & Co., Inc., New York, announces the resignation of Joseph A. King as manager of the Providence branch office. Jesse A. Fraser succeeds Mr. King. Roswell D. Armstrong, who has been manager of Stein Hall's Boston office for a number of years, has been appointed New England manager in addition to his other duties.

The removal of Stein Hall's Atlanta office to new and larger quarters at 80 W. Peachtree Place, N. W., has also been announced.

Plans for the opening of a plant in France to manufacture can-sealing compounds and other products have been announced by the Dewey & Almy Chemical Co. The plant will be located in Epervan, which is in the vicinity of Paris, with Henry Wasmer, Dewey & Almy's managing director in London, supervising operations which are expected to begin next summer. A subsidiary company, to be called Dares S. A. R. L., has been set up to operate the plant, with G. E. Marin, French banker, as president.

The rebuilding of the company's Naples plant, damaged during World War II, has been completed and is now in operation manufacturing can-sealing compounds and other products.

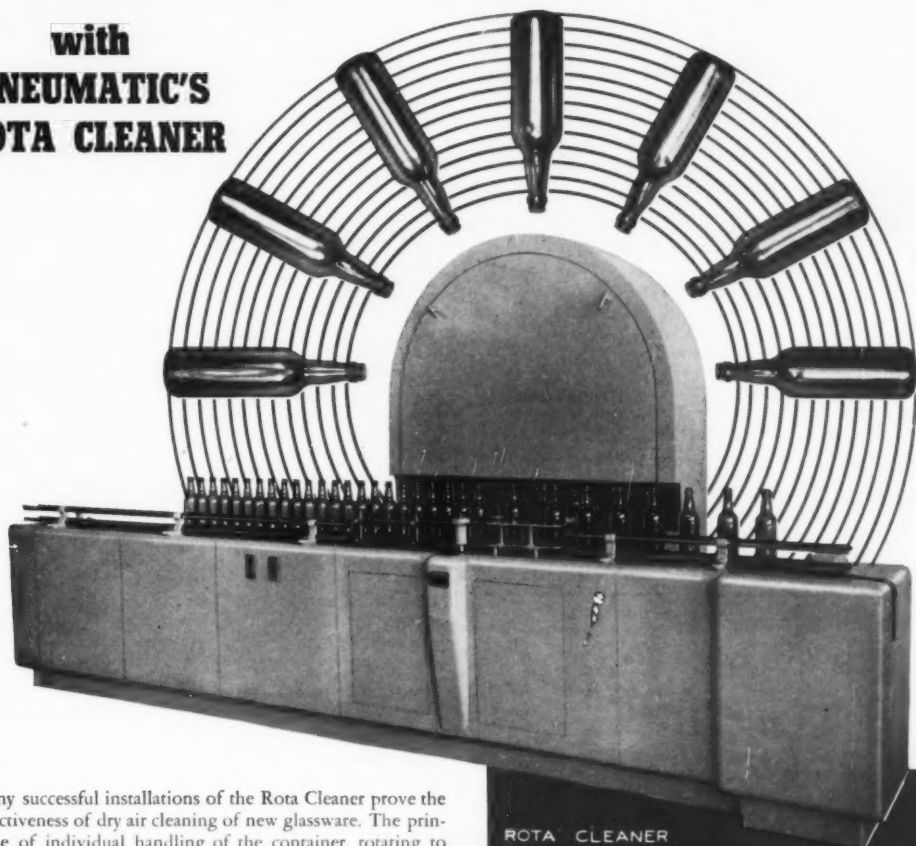
Two organizations nationally known in the paperboard and box industries merged their identities when Hummel & Downing Co. of Milwaukee became a division of Cornell Wood Products Co., with which Hummel & Downing has been affiliated as a wholly owned subsidiary since 1941. Shipping container and folding carton manufacture will continue in the Hummel & Downing Division plant at Milwaukee and corrugated boxes will also be made at the Division's plant in Arlington Heights, Ill. No changes in ownership, personnel or policies are involved in the merger inasmuch as there has been a close affiliation of the two organizations during the eight years Hummel & Downing Co. has operated as a Cornell subsidiary.

William E. Conklyn has been appointed sales representative by Edward Ernold Co., New York. Mr. Conklyn will serve Ernold customers in the Metropolitan New York market on problems involving labeling machines and on their recently introduced case unpacker.

The General Box Co. announces the consolidation of the company's Chicago and Louisville sales territories. Head-

AIR CLEAN *and* SAVE

with
**PNEUMATIC'S
ROTA CLEANER**

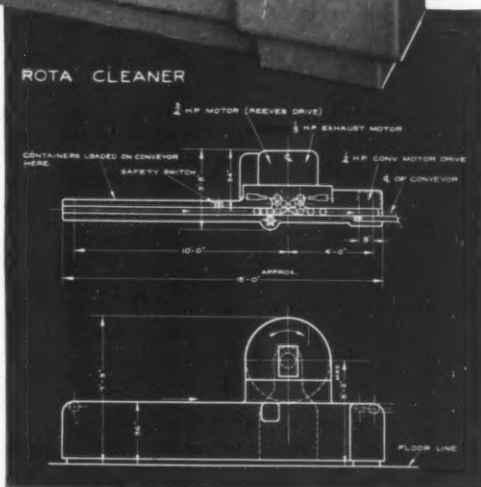


Many successful installations of the Rota Cleaner prove the effectiveness of dry air cleaning of new glassware. The principle of individual handling of the container, rotating to an inverted position and subjecting the interior to a blast of clean dry air, removes all dust and other foreign matter.

Containers are automatically fed through a unique control system that eliminates "shocking" of incoming glass, thereby reducing possible breakage to an absolute minimum. One enthusiastic user (14 machines) boasts "haven't broken a bottle yet!"

Pneumatic's Rota Cleaner will handle regular finish, A. G. S. T. finish and wide mouth ware. Send for Bulletin S-112 which describes this smooth running unit in detail.

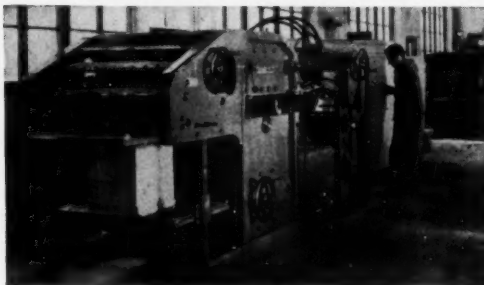
PNEUMATIC SCALE CORPORATION, LTD. 82 Newport Avenue, North Quincy 71, Massachusetts. Branch Offices in New York, New York; San Francisco, California; Chicago, Illinois; Los Angeles, California; Seattle, Washington.



PNEUMATIC

PACKAGING AND BOTTLING MACHINERY

BETTER BOXES, MADE STRONGER IN LESS TIME with the **BOBST AUTOPLATEN!**



- The box costs less in dollars and cents because . . .
- * The Bobst Autoplaten reduces downtime by 75%. Practically all make-ready is done OUTSIDE the machine . . . while another job is running.
 - * The Bobst Autoplaten employs endless chain drives instead of tapes to insure perfect register . . . thus reducing wastage.
 - * The Bobst Autoplaten runs at 4500 BOXES PER HOUR.



Write for the Bobst Brochure.
Full information will be supplied
upon request.

H. H. HEINRICH INC.
200 VARICK ST. NEW YORK 14



Controlled

NET WEIGHING

Model B scale filler with FL gravity flow feeder for fast accurate net weighing of free flowing products. Beans, rice, popcorn, coffee, grass seed, barley, salt and similar materials. The model B with PFK specified for non free flowing items.

The double spout discharge hopper permits handling hard to open cellophane bags at speeds up to 45 or more 1 lb. bags per minute. Rated 4 ozs. to 3 lbs. with tolerance of 1/16 oz. to perfect.

Ask for our catalog No. 48 for this machine and many others operating in milligrams to 100 lbs.



WEIGH RIGHT AUTOMATIC SCALE COMPANY
JOLIET • ILLINOIS • U. S. A.

Plants and People

Continued

quarters of the enlarged territory will be located at Louisville. Also announced were the following personnel changes: **George T. Walne**, vice president, will be transferred from Chicago to Louisville in charge of sales for the combined territories; **C. L. Bruckert**, who has administered sales in the Louisville territory, will be promoted to the position of division sales promotion manager; **William C. Embry** of Louisville, vice president and member of the General Box Co. board of directors, remains as division manager.

T. E. Alwyn, Atlantic Division manager of sales for the American Can Co., has been appointed general manager of sales for the company. Mr. Alwyn, whose headquarters will be in New York, will have direct supervision of the firm's sales activities in the United States, Canada and Hawaii.



T. E. Alwyn

Robert Sidney Dickens & Associates, Chicago design firm, has changed its name to **Dickens, Inc.**, with **R. S. Dickens**, founder, as president and chairman of the board. **Robert H. Askren** was elected vice president in charge of sales.

Also elected vice presidents were **Harry S. Matt**, design coordinator, and **Miss Nita Siegman**, color technician, while **Mrs. Robert Sidney Dickens** was elected secretary and treasurer. Each of the officers will serve as directors.

Franklyn Folding Box Co., Inc., manufacturer of folding paper cartons and automatic boxes, has acquired a large one-story building in Maspeth, L. I., more than doubling their present plant capacity. The move to the new address, 52-01 74th St., Maspeth, will be completed about Feb. 15.

Robert E. Crotty, for many years vice president in charge of sales of the Heminway Corp., Waterbury, Conn., is now in charge of the New York office of **Walter J. Jamieson Corp.**, manufacturers of set-up boxes, at 285 Madison Ave.

John D. Cowan, who started with the firm as a chemist in 1929, was elected a vice president of **West Virginia Pulp & Paper Co.** at a recent meeting of the board of directors.

The Dixie Cup Co., Easton, Pa., has announced the election of **A. R. Lillierapp**, **W. G. Genne** and **A. J. Nolan** as vice presidents of the company. Mr. Lillierapp, who joined the staff very shortly after the company was founded, also continues as treasurer. The following changes in staff assignments have also been made by the company: **W. O. Roe**, assistant to the president; **B. J. Kearney** and **Richard W. Koch**, assistants to the executive vice president; **R. E. Stocker**, assistant development director; **S. L. Muther**, assistant to Mr. Nolan; **J. W. Kuebler**, general works manager; **W. E. Bachman, Jr.**, Easton plant superintendent; **Charles Melick**, supervisor of production planning and inventory control.

F. H. Rhoden, Chase Bag Co.'s manager of burlap purchasing, recently returned to New York from a six-week-on-the-spot observation of India's jute and burlap conditions affecting this country's supply. He confirmed that previously reported confusion still exists. Commenting briefly after a flight which took him around the world, Mr. Rhoden said the monetary disorder between the jute-producing areas of Pakistan and the mills of Calcutta, brought about by the devaluation of English money, would continue to restrict free trading until settled. As head of burlap purchases for Chase, Mr. Rhoden has made three trips to India in the interest of trade relations since the end of World War II.

To serve the increasing technical needs of its customers in the Los Angeles area, **National Starch Products Inc.**, has



Eyes Right...

Yes, it's "eyes right"...when merchandise is packaged in tough, transparent Kodapak Sheet. Lin-
gerie, for example, in gauges .0075 to .020. Slips,
gowns, hosiery—at their loveliest; colors show up
clear and bright; textures, touches of handwork, stand
out in infinite detail. Shoppers stop, look—and buy—
without fingering; stocks stay fresh, salable.

Kodapak Sheet is easy to handle, comes in two basic
forms: Kodapak I Sheet, cellulose acetate, gauges up
to 0.060"; Kodapak II Sheet, cellulose acetate butyrate,
gauges up to 0.002".

Both are made to the same high standards, under the

same rigid conditions as Kodak photographic film base.

Kodapak Sheet is made by Kodak for use by a wide
range of fabricators. For further information about
this product and its end uses, consult your nearest
representative, or write Kodak. If you have a particu-
larly complicated problem, a day or two in the Kodapak
Demonstration Laboratory in Rochester will prove
helpful. Make an appointment today.

Cellulose Products Division

Eastman Kodak Company, Rochester 4, N. Y.

Sales offices in New York, Chicago. District sales representatives in
Cleveland, Philadelphia, Providence. Pacific Coast distributor: Wilson
& Geo. Mayer & Co., San Francisco, Los Angeles, Portland, Seattle.
Canadian distributor: Paper Sales, Limited, Toronto, Montreal.

FOR THE DISPLAY YOU WANT...THE PROTECTION YOU NEED

Kodapak Sheet

"Kodapak" is a trade-mark

Kodak
TRADE-MARK

NO PASTE • • • • NO STITCHING • • • • NO STAPLES

when these
bags are tagged with
Heat Sealing Saddles, coated with

PROX-SEAL*

Seals on CELLOPHANE • GLASSINE
SARAN • PLIOFILM • PARCHMENT, etc.



Safer...no clips, staples, or paste mess.
Tag surface receptive to finest printing.
Unobstructed view of bag contents.
Does not puncture the film.
A space for price mark "write in".
No investment in costly printed bags.
A means of hanging for display.
No "front" and "back" of package.
Heat seal faster than stitching.
Applied on Chaffee, Doughboy,
Seal Rite, Wrapade, etc.

WRITE FOR LIST OF CONVERTERS AND
RAW MATERIAL SOURCES

PYROXYLIN PRODUCTS, INC.

PAOLI, PENNA. CHICAGO 32 WICHITA, KANSAS

Plants and People

Continued

announced the transfer of **Robert L. Burk**, technical service engineer, from the company's San Francisco laboratory. The Los Angeles headquarters for both National Starch Products and National Adhesives Division are located at 1855 Industrial St.

A. E. Sierad Co., Inc., 805 Mamaroneck Ave., Mamaroneck, N. Y., has been formed to process bright gold, silver, etc., finishes on plastics, glass, metals and wood. The company will also be set up to fill liquids and powders and do general assembly and packaging work. **Albert E. Sierad** is president and **Stanley Sapery**, vice president. All sales will be handled through the **Stanley Sapery Co.** at 341 Madison Ave., New York.

Coryngton Products Co., Division of **Shoup-Owens, Inc.**, Hoboken, N. J., has been formed to offer a complete line of wound fibre containers to meet all requirements from large-capacity commercial use to small fancy packages. **O. L. Coryat** and **J. T. Harrington**, formerly the president and vice president, respectively, of **Harcord Mfg. Co.**, Jersey City, will be active vice presidents in charge of sales and production.

Byron B. Josi has been appointed sales manager of **Simplex Packaging Machinery, Inc.**, Oakland, Calif. He formerly represented the **Plastics Division of Celanese Corp. of America** on the West Coast and previous to that was with **International Business Machines and Owens-Illinois Glass Co.**

The Milton Anderson Co. was organized last month for the purpose of designing and producing printed material. Offices of the company are at 461 W. 23rd St., New York, on the premises formerly operated by **Russell-Anderson**, a partnership which has been dissolved.

John H. Funkey has been elected vice president and sales manager of **The Carr-Lowrey Glass Co.**, Baltimore, Md. Mr. Funkey, who joined the organization in 1932, has been assistant secretary of the company since 1944.

The Farrington Mfg. Co., Boston, Mass., manufacturers of covered metal display boxes, announce the acquisition of a new plant in Walpole, Mass., by **Farrington Texol Corp.**, its wholly owned subsidiary. The modern, new plant contains about 25,000 sq. ft. of space and is especially designed for the manufacture of coated fabrics and compounded chemicals. The new plant is expected to be in operation early this year.

John McMaster has been appointed assistant manager of the graphic arts sensitized goods sales division of the **Eastman Kodak Co.**, Rochester, N. Y.

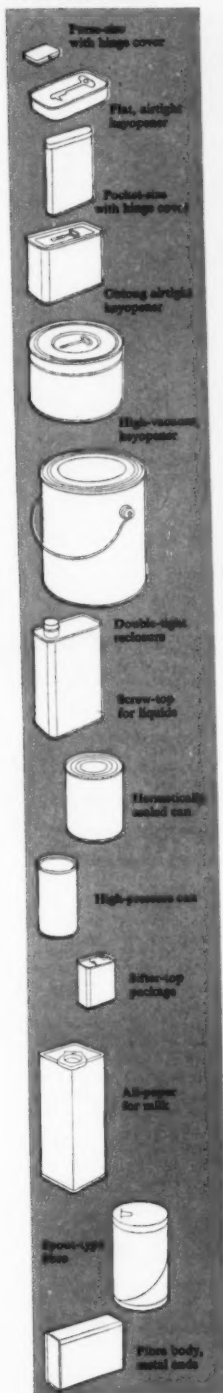
P. A. Steed has been elected vice president in charge of sales and advertising of the **J. L. Ferguson Co.**, Joliet, Ill., manufacturers of packaging machinery.

Edward H. Bell, vice president of the **American Can Co.** in charge of West Coast, Alaskan, Hawaiian and British Columbia operations, died last month at his home in San Francisco after a brief illness. He was 61 years of age and had been with American Can for more than 40 years.

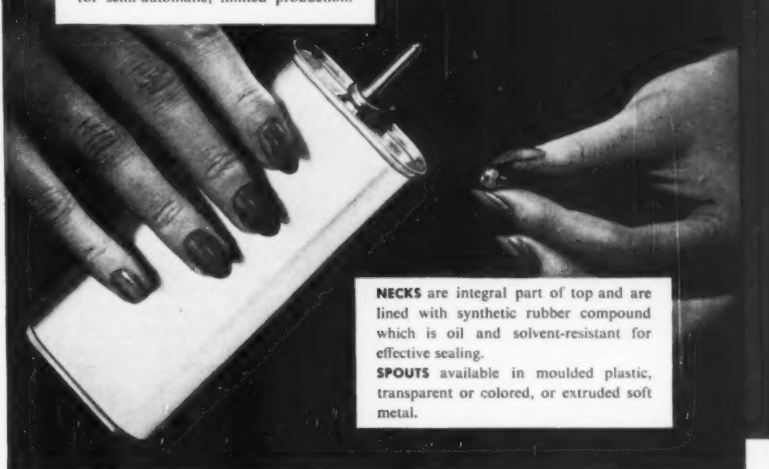
Paul S. McHugh, who represented **Bingham Brothers Co.**, adhesive manufacturer, in the Metropolitan area of New York for a number of years, died suddenly on Nov. 26 at his home in East Orange, N. J. Death was caused by a heart attack.

Reynold Goodman, Sr., vice president of the **Crystal Tube Corp.**, Chicago, and president of **Crystal Transparent Corp.**, New York, died on Dec. 21. Mr. Goodman was 70.

**WHICH PACKAGE
SUITS YOUR PRODUCT?**



"OB-ROUND" shape means more cans pack in shipping container; more squirt per squeeze—from bellows-action sides that won't stick. Three heights (same size base): 1 oz; 3 oz; 4 oz. Full space for litho-label in many colors. Two types of closing machines available—for high-speed and for semi-automatic, limited production.



NECKS are integral part of top and are lined with synthetic rubber compound which is oil and solvent-resistant for effective sealing.

SPOUTS available in moulded plastic, transparent or colored, or extruded soft metal.

If the consumer uses your product in small amounts at a time...

this packaging suggestion may interest you

TWO USEFUL PRINCIPLES are apparent in Canco's familiar lighter-fluid and household oil container.

The little nozzle dispenses a small amount at a time, and the screw top makes a tight reclosure for a volatile liquid.

In addition to lighter fluid

Immediately, it looks as if this container would be adaptable in some form to cologne, liquid deodorants, sun-tan lotions, cleaning fluids, polishes, rubbing alcohols, and oil and other liquid hair preparations.

How about this container for viosterol and other highly concentrated liquids requiring measurement by drops?

It's a thought to consider, and perhaps your package-development people and ourselves should talk things over.

Since 1901, Canco has been out front in creating new and more effective packages. There is hardly a major development in the packaging industry—whether it be for a food or non-food product, whether the problem is metal, or fibre, or a combination of both

—that this keen, alert organization has not pioneered.

Canco can help you with eye-catching label designs, cost-cutting, sales-building advice on packages, processes, filling and closing.

Canco stands ready to serve you promptly in production-line emergencies. From Canco you get as many containers as you need when you need them. Let's get together! Call Canco first...



leading packers realize TREMENDOUS SAVINGS

with

Elgin

TWIN-FILLER for FROZEN FOODS

*in cellophane lined cartons
and composite packages . . .*

Cost-Wise packers in large and small frozen food plants know the many advantages of Elgin automatic filling equipment. For example the Elgin Twin Filler delivers high-speed, uniform, trouble-free production on a wide range of frozen products including sliced strawberries, chopped spinach, apple sauce and squash. For lower initial costs, minimum maintenance and operating expense, choose Elgin filling machines.

Write Today for New Folder Illustrating Elgin Equipment

ADDRESS DEPT. PA.



The Twin Filler is compact, speedy and accurate. Easily cleaned, and quickly adjusted for changes of pack or container sizes.

Ideal for frozen foods, peanut butter, mayonnaise, jams, jellies, processed cheese, ointments, creams, greases, paints.

ELGIN MANUFACTURING COMPANY • 200 BROOK STREET • ELGIN, ILLINOIS

Correct from Any Angle

**MACK PLASTIC
MOLDED CLOSURES
AND PACKAGING
SPECIALITIES**

**STANDARD SIZES DELIVERED FROM
STOCK — FAST SERVICE ON CUSTOM
PACKAGING AND SEALS**

Count on MACK for quick delivery of molded closures — in all sizes and in any quantity. Choose from an interesting variety of modern stock designs. And for special packaging ideas, consult MACK technicians. Their sales-proved experience covering products of every kind is available to you without obligation. Samples of closures and prices sent on request. Just call or write Mack Molding Company, Inc., 160 Main Street, Wayne, New Jersey.

Mack
**MOLDED
EXCELLENCE**



**THREE FULLY EQUIPPED
PLANTS TO SERVE YOU**

In de-luxe packaging
Velvets offer you nothing that
Flock Papers can't do—and
at a fraction
of the cost!



The richest
and most colorful
Flock is

CLAREMONT FLOCK!

Box papers, luxuriously surfaced with richly-colorful flock are carried as roll or cut stock by the better-quality paper merchants. Upon investigation, you'll find too that their best-quality velvety offerings are processed with Claremont Flock! Claremont Flock is uniform; responds perfectly to adhesive preparation, and forms a deep-pile foundation that won't fuzz, separate, crack or rub-off!

Claremont Flocks (cotton, rayon, wool) ... in 18 brilliant colors, are champions in their art! Complete details, flocked color cards, samples and prices upon request. Inquiries invited. Write Claremont today!

Specify Papers
that are
Velvetized
with
**CLAREMONT
FLOCK**

Check this detail with your box-maker. Papers, when processed with Claremont Flock are fast ... colorwise — and saleswise!



CLAREMONT
WASTE MANUFACTURING
COMPANY
•
CLAREMONT
N. H.

CLAREMONT FLOCK ... the Plush that Sells!



For Your Information

Gustav L. Nordstrom, associated with the set-up paper box business and supplies trade since 1936, has been appointed secretary of the **National Paper Box Mfrs. Assn.**, to succeed the late **William R. Kreeger**. Mr. Nordstrom joined the association as assistant secretary in May, 1948, and was acting secretary following the death of Mr. Kreeger on Dec. 11.

The progress made in the field of industrial design is dramatically presented in a newly published book, "U. S. Industrial Design 1949-50," (The Studio Publications, Inc.; \$10) compiled and edited by the **Society of Industrial Designers**. First of a planned series, the book illustrates the work of leading members of the profession and explains the design problems presented to them and how they were solved. The examples have been selected and presented by the designers themselves to illustrate their methods of working. The book is divided into seven categories covering a wide range of products and equipment, including a 16-page section on packages and general identification programs.

At a recent meeting of the **Can Mfrs. Institute's** board of governors, **Ralph C. Rosecrance** was elected president. Mr. Rosecrance, who succeeds **Dan M. Heekin** as president, is vice president of **J. L. Clark Mfg. Co.**, Rockford, Ill. **H. Ferris White**, executive vice president of the Institute, and **Clifford E. Sifton**, secretary and treasurer, were both re-elected for the coming year. **Harold H. Jaeger** continues as director of CMI's Marketing Bureau. Newly elected members of the board of governors are **F. J. Costello**, Federal Tin Co., Inc.; **George M. Doliner**, Eastern Can Co., Inc.; and **W. C. Stolk**, American Can Co. Other members of the board of governors are: **Richard Amundsen**, The Texas Co.; **C. H. Black**, American Can Co.; **F. H. Braithwaite**, Crown Can Co.; **E. F. Euphrat**, Pacific Can Co.; **T. C. Fogarty**, Continental Can Co.; **D. M. Heekin**, The Heekin Can Co.; **V. K. LeComte**, LeComte & Co., Inc.; **Sherlock McKewen**, Continental Can Co.; **G. A. Milton**, Geo. A. Milton Can Co., Inc.; **E. D. Murphy**, National Can Corp.; **P. E. Pearson**, Continental Can Co.; **J. Howd Phelps**, Phelps Can Co.; **R. C. Rosecrance**, J. L. Clark Mfg. Co.; **R. S. Solinsky**, Cans, Inc.; **David Stern**, Stern Can Co.; **R. P. Swartz**, Crown Can Co.; **H. K. Taylor**, Geo. D. Ellis & Sons, Inc.; **R. C. Taylor**, American Can Co.; and **C. L. Thompson**, National Can Corp.

Two new booklets have just been published by the **Bakelite Corp.**: a revised edition of "Vinylite Resins and Plastics," an informative guide explaining the forms in which these

materials are available, their important properties and up-to-date listings of their more important applications; "Vinylite-Vinyl Butyral Resins," containing technical data on the general properties and applications of the materials. Copies of both booklets may be obtained by writing to Bakelite Corp., 300 Madison Ave., New York 17, N. Y.

For the second year, \$100,000 for grants-in-aid to universities to "stockpile" knowledge through the advancement of fundamental science has been authorized by the **Du Pont Co.**, Wilmington, Del. These grants-in-aid are for unrestricted use in the field of fundamental chemical research. They provide \$10,000 for each of 10 universities for the 1950-51 academic year. In this program, the universities themselves select the research projects for which the grants will be used, the only stipulation being that they be free from any commercial implications at the time the work is initiated. The company emphasized that there shall be complete freedom in the communication and publication of the results of the research work supported by the grants. Institutions which will receive \$10,000 grants each are: California Institute of Technology, Cornell University, Harvard University, Massachusetts Institute of Technology, The Ohio State University, Princeton University, Yale University, University of Illinois, University of Minnesota and University of Wisconsin.

At the **16th Annual Products Show** sponsored by the **Purchasing Agents Assn. of Chicago** at the Hotel Sherman on Feb. 14, 15 and 16, more than 100 leading manufacturers and industrial distributors will display their 1950 lines. Total attendance is expected to exceed 15,000, according to **R. L. Krueger**, chairman of the show and assistant purchasing agent for Goodman Mfg. Co.

The **Freight Loading & Container Section** of the **Assn. of American Railroads** has announced the transfer of **A. E. Bourdon**, engineer, from the Chicago headquarters to the association's New York office at 30 Vesey St., New York 7. The primary purpose in locating an engineer in the Eastern region is to facilitate assistance to shippers, manufacturers and railroads that might have individual container and carloading problems dealing with shipments of general merchandise commodities. One important phase of Mr. Bourdon's activities will consist of surveys of commodities appearing at or near the top of the list of loss and damage claims in the Eastern and Northeastern regions.

A new course in "Package Development Techniques," which will discuss the design, development, production, marketing and consumer use of packages, will be offered at **New York University's School of Commerce, Accounts and Finance**, beginning Feb. 9. It will be under the direction of **Ben Nash**, adjunct professor of marketing and package development consultant, and **Robert D. Harper**, assistant professor of marketing and president of **R. D. Harper Associates**, product and business development. Covering a broad range of topics, the course will include a number of talks by guest specialists. Among the topics to be discussed will be the different types of packages; materials, constructions, production and marketing considerations; development procedures; as well as the direct application of these factors to package problems. In addition, the course will tell how to create brand names and trademarks, how to design packaging for efficiency and salability, how to

What's doing

- Feb. 20-24—**New York Gift Show**, Hotels Statler and New Yorker, New York.
- March 6-10—**Boston Gift Show**, Hotel Statler, Boston.
- March 7-9—**Associated Chain Drug Stores**, Convention, Hotel New Yorker, New York.
- March 9—**Drug, Chemical & Allied Trades**, Banquet, Waldorf-Astoria Hotel, New York.
- March 13-14—**Federal Wholesale Druggists' Assn.**, Convention, Hotel Statler, New York.
- March 21-23—**Folding Paper Box Assn. of America**, annual meeting, Drake Hotel, Chicago.
- March 28-31—**National Plastics Exposition**, Navy Pier, Chicago.



Saran film

**protects quality . . .
displays goodness**

**NEW
LIVER SAUSAGE
WRAP**



Available—in any size of fabricated tubular form or in bags.

Brand Identification—Saran Film can be printed upon or banded.

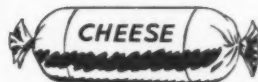
Moisture and gas protection—guards against drying out and protects original flavor against harmful exposure.

Saran Film was specified as the packaging material for Swift's liver sausage . . . with exciting sales success! The sparkling transparency of saran film reveals the tempting goodness of liver sausage . . . while the natural flavor and moisture are safely retained. The superior qualities of saran film, impermeability, toughness, transparency, recommend its use for packaging meats, natural cheese, dried fruit, nuts and candy.

Adaptable—for use on standard stuffing equipment.

Supply—let Dow put you in touch with Saran Film Converters.

DOW TECHNICAL SERVICE—can give answers to your specific plastics packaging needs.



use

Saran film

to package natural cheese
in moisture-proof . . .
flavor-retaining units

The Dow Chemical Company
Plastics Division—Dept. TOF-9
Midland, Michigan

Please send me additional information about Saran Film Packaging.

Name _____
Company _____
Street _____
City _____ State _____

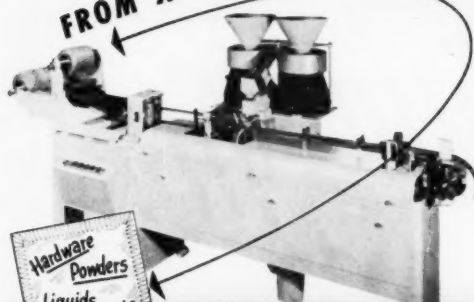
DOW

Plastics

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(Continued)

secure economical package production and how to establish requirements and specifications for production and marketing.

Guest speakers include **Frank Gianninoto**, **William Poliner**, **George Utley**, **Robert Crotty** and **Clarence Hornung**, industrial designers; **B. D. Fuerst**, Owens Illinois Glass Co.; **Herman Segall**, Consolidated Lithographing Corp.; **Willard F. Devenau**, National Folding Box Co., Inc.; **Monroe Adamson**, Consolidated Lithographing Corp.; **William T. Brown**, E. I. du Pont de Nemours & Co., Inc.; **George Welp**, International Printing Ink; **Charles A. Southwick, Jr.**, package engineering consultant; **Fred Wohlers**, The Hinde & Dauch Paper Co.; **E. H. Balkema**, Colgate-Palmolive-Peet Co.; **J. Whitney King, Jr.**, American Can Co.; **E. C. Westervelt**, Package Machinery Co.; **Charles A. Breskin**, publisher of **MODERN PACKAGING**.



C. A. Putnam

Plastics engineers attending the 1950 Technical Conference of the **Society of Plastics Engineers** in Cleveland elected the following officers to represent the national society during the coming year: **C. Todd Clark**, director of the Plastics Division of the F. Burkart Mfg. Co., St. Louis, president; **Islyn Thomas**, president of Thomas Mfg. Corp., Newark, N. J., vice president; **Robert L. Davis**, sales engineer for Continental Can Co., secretary; **W. O. Bracken**, Hercules Powder Co., treasurer.

The **Hinde & Dauch Paper Co.**'s "Little Packaging Library" series of packaging and shipping information booklets has been extended to 11 volumes with the publication of "How to Test Corrugated Shipping Boxes." This latest study describes the various scientific tests and testing equipment used by corrugated box manufacturers to predetermine the efficiency of corrugated boxes, lists the "minimum requirements" as established by Rule 41 and shows the box user how to get the most for his money in buying corrugated boxes. Copies are available from the **Hinde & Dauch Paper Co.**, Sandusky, Ohio.



E. A. Hildreth

Eugene A. Hildreth, Toledo, Ohio, manager of the Market Development Dept. of Owens-Illinois Glass Co., was elected president of the **Canning Machinery & Supplies Assn.** at the association's recent annual meeting in Atlantic City. Mr. Hildreth, who has served as vice president and as a director of the association for the past two years, succeeds **J. C. Whetzel** of the **Carnegie-Illinois Steel Corp.**

The following panel of judges has been selected for the 1950 **Carton Competition** sponsored by the **Folding Paper Box Assn. of America**: **Morton Goldsholl**, President of the Society of Typographic Arts; **O. T. Sands**, Packaging Dept., Sears Roebuck & Co.; **F. W. Boulton**, art director of J. Walter Thompson; **Neil McCash**, Packaging Div., Kroger Co. The panel will select the outstanding boxes for awards which will be presented at the 1950 annual meeting of the association at the Drake Hotel, Chicago, March 21 to 23. Boxes will be separated into classes based on end use of the product packaged and, as usual, a grand award will be given by the votes of the members present at the annual meeting. All boxes entered in the competition will be eligible for this award.

•MANUFACTURERS' LITERATURE.

To obtain any of the booklets or catalogs listed below, simply circle the corresponding number on the post card, fill in the information requested, and mail.

ART FOR RUBBER PLATE PRINTING. Instruction sheet describing the correct preparation of artwork for rubber plate printing, including type selection and color separation, together with explanatory illustrations. Mosstype Corp. (2-700)

CAPPER AND SEALER. Specifications and features of the new Resina automatic equipment developed for applying "U-Press-It" closures are given. Illustrated. Resina Automatic Machinery Co., Inc. (2-701)

FILLING MACHINES. Various S & S filling machines are illustrated and described in this 4-page brochure. Operational data and specifications are included. Stokes & Smith Co. (2-702)

PANELYTE. The new Cameco design in high pressure laminated Panelyte is illustrated in some of its various uses. Many suggestions for the use of this material are listed. 4 pages. Panelyte Division, St. Regis Paper Co. (2-703)

PHARMACEUTICAL EQUIPMENT. Brochure featuring the many different types of pharmaceutical equipment manufactured for washing, filling and sealing of ampuls, vials and similar containers. 6 pages. Perfektum Products Co. (2-704)

LIQUID FILLING MACHINES. Specifications, illustrations, features, and other important information on various MRM liquid filling machines are given. 4 pages. M. R. M. Co., Inc. (2-705)

JOBS IN THE PAPERBOARD AND FOLDING CARTON INDUSTRY. Brochure illustrating and describing various phases of the paperboard and folding carton industry, pointing out future careers for students. 32 pages. Robert Gair Co., Inc. (2-706)

LIGHT DUTY BELT CONVEYOR. Information on the ease of speed control, simplicity of replacing belt, arrangement of belts, standard specifications and standard extras on light duty roller bed conveyors. 4 pages. Island Equipment Corp. (2-707)

JAR AND BOTTLE FILLING MACHINE. Bulletin giving the features and data of the Arenco Type GAM jar and bottle filling machine for marmalade, apple sauce, mayonnaise, mustard, paint, varnish, oil and other liquids. Arenco. (2-708)

AUTOMATIC GLUER. The Glu-Matic, used for gluing off box wraps in the set-up paper box field, or for doing short run labeling and gluing, without hand feeding, and without change parts, is illustrated and described. Operational data is given. New Jersey Machine Corp. (2-709)

PRODUCTION AND CHECKING SCALES. Specifications, illustrations, and the features of Exact Weight production and checking scales with center tower position, are given. The Exact Weight Scale Co. (2-710)

VACUUM FILLING MACHINES. Bulletin giving descriptions of the General Mills vacuum filling machines, single head Model D, including the types of products, handles and sizes of containers filled. General Mills, Inc. (2-711)

PACKAGE IN PLASTICS. Brochure discussing the many ways of packaging with plastics. Illustrations of some plastic packages used by well-known manufacturers are included. 24 pages. Monsanto Chemical Co. (2-712)

CONVEYOR BELTS. Catalog section explaining the yardsticks employed in belt engineering to differentiate grades, pictures and describes the conveyor belts in its line, cites the common application for each, and also devotes a page to special constructions obtainable in the various grades. The B. F. Goodrich Co. (2-713)

VENT-VU BAGS. Information on Vent-Vu bags for oranges is given in this 6-page illustrated brochure. Samples are included. Union Bag & Paper Corp. (2-714)

PLASTIC BOXES. Catalog sheet giving sizes, number of compartments, arrangement of compartments, and other specifications on Vitehek special plastic boxes. The Vitehek Tool Co. (2-715)

TRITECT. Important information on Do-beckmun's wax laminated packaging material, transparent double film that provides extra moisture-vapor-proofness and extra packaging strength. 4 pages. The Do-beckmun Co. (2-716)

PRESSURE-SENSITIVE TAPES. Illustrated folder on strapping steel strip, shapes, etc., with extra and super strength "Booth" pressure-sensitive tapes. Illustrated. 4 pages. Minnesota Mining & Mfg. Co. (2-717)

SHEETING AND STACKING MACHINE. Specifications, illustrations, and other information on the Peters transparent cellulose paper sheeting and stacking machine is given. A list of some well known users is also included. 4 pages. Peters Machinery Co. (2-718)

AIR CLEANING GLASSWARE. Special booklet devoted to the Rota Cleaner machine for air cleaning new glassware up to the 1 quart size. Photos, specifications, floor plan, and list of users are included. 4 pages. Pneumatic Scale Corp. (2-719)

PLIOFILM. Brochure generally describing Pliofilm, its qualities, advantages, types and packaging applications. Illustrated. 4 pages. Goodyear Tire & Rubber Co. (2-720)

THERMOUMOUNTING KODAPAK. Information is included on temperature, time, pressure, surface, papers, inks, presses, etc., in applying thermomounting Kodapak. 3 sheets. Eastman Kodak Co. (2-721)

OFFSET PROCESS COLORS. Folder containing mixture charts for offset four-color process inks plus color swatches of each ink—all shown on both coated and uncoated stock. Available to printers and other ink users only. International Printing Ink Div., Interchemical Corp. (2-722)

PLASTICS. Price schedules for Koppers plastics including polystyrene 3, polystyrene 7, polystyrene 8, cellulose acetate, ethyl cellulose, and Koppers adhesive for polystyrene. 8 pages. Koppers Co. (2-723)

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PAINT FILLER. The Elgin Model H paint filler, cover dropper, and capper, used for filling paints in all size containers from 32nds to gallons, placing the covers and sealing the cans automatically, is illustrated and described. Specifications are included. Elgin Mfg. Co. (2-724)

LIQUID FILLING EQUIPMENT. Specifications, illustration, and features of the Packer Gravity liquid filling machine, which fills pint, quart and two gallon cans, are given in this bulletin. Packer Machinery Corp. (2-725)

BAG MAKING MACHINE. Bulletin describing the Simplex bag making machine which makes bags from practically all types of heat sealing materials, with crimp or fold up bottom. Illustrated. Simplex Wrapping Machine Co. (2-726)

BOTTLE WADDING EQUIPMENT. The Consolidated Kottoners Models K-2, K-3, and K-4 used for bottle wadding are illustrated and described. 4 pages. Consolidated Packaging Machinery Corp. (2-727)

GUMMED TAPE MOISTENING SOLUTION. Given is information on the description and properties of Tape-Tack, a gummed tape moistening solution. Preparation of the solution is explained. Various applications of this solution are also included. Paisley Products Inc. (2-728)

LABEL PRINTING MACHINE. Specifications, illustrations, and other important information on the Model 105 heavy duty label printing machine used for printing complete labels or filling variables is given. Markem Machine Co. (2-729)

COLLAPSIBLE TUBES. A two color booklet, containing 16 pages of illustrations and descriptions of various tubes, closures, and applicators. Sun Tube Co. (2-730)

JUMBAGS. A photographic brochure showing uses of Jumbags, a machine made, accordion-pleated bag for wrapping items such as chairs, washing machines, and other large pieces. Sherman Paper Products Corp. (2-731)

PAPER SELECTOR CHART. A handy chart to help the printer, lithographer, etc., in the proper selection of the correct paper for a specific job. Oxford Paper Co. (2-732)

HYDROTONE INK COLOR SELECTOR. Selector shows 30 different standard ink colors, and dozens of color combinations for printing kraft, tissue, or other absorbent stocks. Bensing Brothers and Deesey. (2-733)

SYLVANIA CELLOPHANE. A complete price list on both moistureproof and non-moistureproof rolls and sheets, along with general information regarding the correct ordering process. Sylvania Division, American Viscose Corp. (2-734)

DU PONT POLYTHENE. A 4 page leaflet describing the properties of polythene as a packaging material. E. I. du Pont de Nemours & Co., Inc. (2-735)

ANILINER AND CELLOPRINTER. This descriptive bulletin contains 4 pages of specifications on the master and standard aniline presses as well as the junior aniline press for cellophane, foil, paper, and glassine. Kidder Press Co., Inc. (2-736)

COUNTING BY WEIGHT. A condensed catalog of standard and special model scales used in modern weighing, counting, testing measuring, and controlling operations. Toledo Scale Co. (2-737)

VAPOR PHASE INHIBITOR. An 8 page brochure is available describing this method of rust prevention and results of many tests made by the licensing company, The Shell Development Co. The Marvelum Co. (2-738)

ELECTRIC FILLER AND PROPORTIONING MACHINE. A 4 page illustrated folder describing this filler for powders, liquids, or viscous materials. G. Diehl Mateer and Co. (2-739)

CLOSE-UPS OF SUCCESSFUL CORRUGATED BOXES. An informative, loose-leaf catalog in full color offers interesting examples of how corrugated boxes can be used in merchandising. The Hinde and Daugh Paper Co. (2-740)

A YEAR'S SHOWING OF 24 SHEETS. An interesting case history of the development of Rheingold posters for the entire year of 1948. Forbes Lithograph Co. (2-741)

PROCESSING MACHINERY. A 2 color, illustrated booklet showing a complete line of machinery for processing paper products, including printing presses, washers, combiners, etc. Hudson-Sharp Machine Co. (2-742)

SEAMLESS PLASTIC VIALS AND TUBES. Many types of seamless vials and tubes are listed and illustrated in this pamphlet. Lusteroid Container Co. (2-743)

THE SELLING POWER OF FULL COLOR. A 24 page, 4 color booklet showing the advantages of the use of color in merchandising, and how lithography accomplishes the job. Stecher-Traung Lithograph Corp. (2-744)

AUTOMATIC AND SEMI-AUTOMATIC PACKAGING MACHINERY. Illustrated literature on heat-sealing equipment, wrapping machinery, sheet-gluer, etc. Wrap-Ade Machine Co., Inc. (2-745)

AUTOMATIC MARKING MACHINE. A case history, uses, possible operations, and informative data on the Auto-Printer, for imprinting cartons, multi-wall bags, wooden shooks, etc. Industrial Marking Equipment Co. (2-746)

COATING AND LAMINATING MACHINE. Specification sheets covering the Haida Universal hot melt coating and laminating machine, Model UHC-27. Illustrations included. Haida Engineering Co. (2-747)

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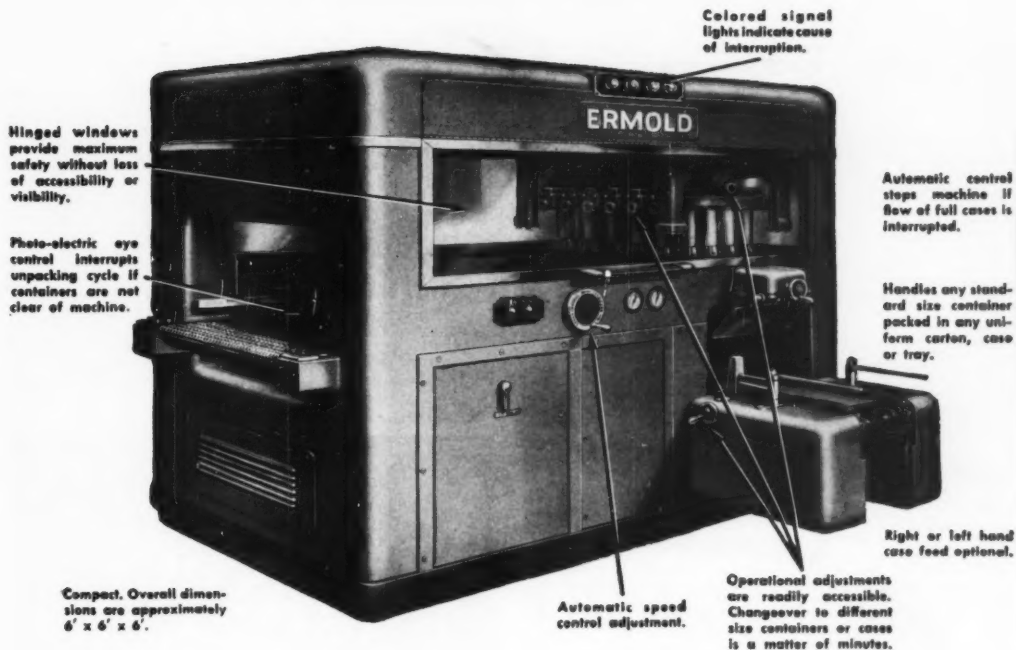
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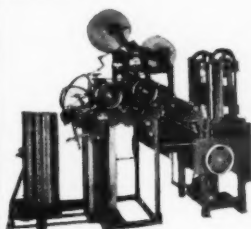
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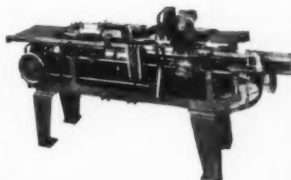
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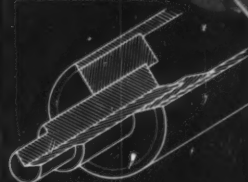
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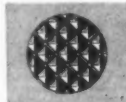
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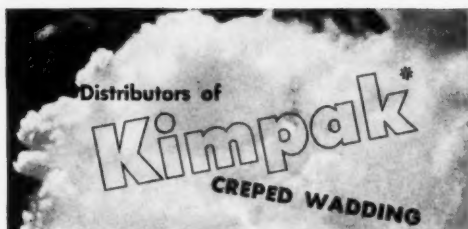
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U.S. Patents Digest

Edited by H. A. Levey

This digest includes each month the more important patents which are of interest to those who are concerned with packaging materials. Copies of patents are available from the U. S. Patent Office, Washington, at 25 cents each in currency, money order or certified check; postage stamps are not accepted.

Container, R. J. Crawford (to American Can Co., New York, N. Y.). U. S. 2,488,526, Nov. 22. A dispensing container comprising in combination a tubular body, said body at the dispensing end terminating in an annular cover member.

Container, G. C. Erb (to American Can Co., New York, N. Y.). U. S. 2,488,528, Nov. 22. A sheet-metal, tearing-strip container comprising a tubular body having a tearing strip integrally formed and disposed in the periphery of the body wall, with separate collar band secured to body wall.

Insulated Bottle Assembly, R. L. Stallings, Norfolk, Va. An insulated bottle assembly comprising a plurality of detachably connected insulated bottles, each of said bottles being substantially circular in cross-section and provided with a unitary side wall having a single thickness.

Packing Case, F. M. Talbot, Evansville, Ind. U. S. 2,488,692, Nov. 22. A collapsible box construction comprising in combination a pallet base, a relatively rear panel, opposing side panels, each side panel being hinged by a rear vertical end portion to the respective vertical end portions of the rear panels, whereby side and rear panels are an integral unit foldable into substantially U shape.

Collapsible Tray or Carton, K. T. Buttery (to Sutherland Paper Co., Kalamazoo, Mich.). U. S. 2,488,702 and 2,488,704. A collapsible tray or box formed of an integral blank comprising a bottom and side and an end wall hingedly connected thereto and corner flaps hingedly connected to the ends of the end wall, the bottom edges of the corner flaps in the flat blank substantially aligned with the hinge connections for the end wall to the bottom.

Collapsible Trap or Box and Box Member, K. T. Buttery and R. C. Stenger (to Sutherland Paper Co., Kalamazoo, Mich.). U. S. 2,488,705, Nov. 22. A collapsible tray or box formed of an integral blank comprising bottom, side and end walls hingedly connected thereto and corner flaps hingedly connected to the ends of the end walls and foldable on the outer sides of the side walls when they are in erected position.

Collapsible Tray or Box, K. T. Buttery and R. C. Stenger (to Sutherland Paper Co., Kalamazoo, Mich.). U. S. 2,488,706, Nov. 22. A collapsible tray or carton formed of an integral blank comprising bottom, side and end walls hingedly connected thereto and corner flaps hingedly connected to the ends of the end walls and foldable on the outer sides of the side walls when they are in erected position.

Compact, B. F. Conner and A. Tatre (to Colt's Mfg. Co., a corporation of Connecticut). U. S. 2,488,850, Nov. 22. A compact having in its body a recess for holding powder and a powder seal for preventing powder from sifting out of recess, powder seal comprising a notched primary sealing member substantially closing the recess and having a depression therein, and a secondary sealing member rotatably carried by primary sealing member and positioned within the depression therein for movement to and from positions preventing and permitting access through primary sealing member to powder in recess.

Pallet, J. V. Spelle (to The National Sugar Refining Co., New York, N. Y.). U. S. 2,489,054, Nov. 22. A palletized package unit including a pallet consisting of a sheet of composition material bent to provide side walls having outwardly extending flanges, packages having a height substantially equal to the height of side walls, a second layer of packages laid on and adhesively secured to first-named packages and extending over and adhesively secured to outwardly extending flanges, and additional layers of packages in turn laid on and adhesively secured to the immediately preceding layer.

Tote Box Having Integral Handles, C. W. Praeger, H. Blum and H. Joehimsen (to Sturdibill Milk Box Corp., Brooklyn, N. Y.). U. S. Re. 23,178, Nov. 29. A box for milk containers, cartons and the like, comprising box sides, a bottom,

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Combination Wrap. Delicate electronic tube. Photo courtesy of Gordos Corp., Newark, New Jersey.



Absorbent Packaging. Highly perishable Orchids. Photo courtesy of Beall Greenhouse Company, Vashon, Washington.

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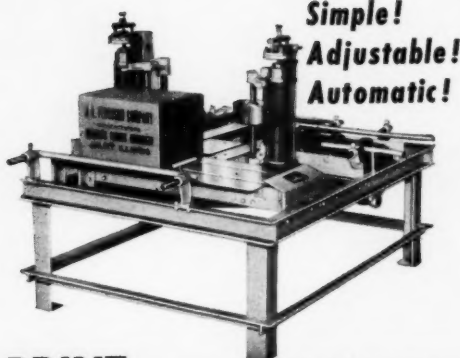


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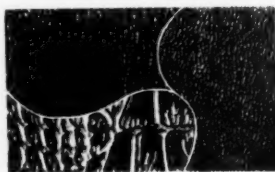
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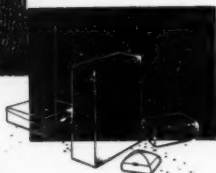
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Continued

box ends connected to box sides and a permanent reinforcing handle construction located at each end of the box.

Package for Shirred Pliable Material, F. S. Heilbronner (to Transparent Package Co., Chicago, Ill.). U. S. 2,489,490, Nov. 29. A package holding a plurality of shirred tubes of pliable plastic material, including closure means permitting withdrawal of shirred tubes in a flattened and extended ribbon-like condition, comprising a tubular package casing of pliable sheet material and flattened at one end.

Container, K. T. Buttery (to Sutherland Paper Co., Kalamazoo, Mich.). U. S. 2,489,616, Nov. 29. The combination of a container for holding liquids comprising a body and cover therefor, the cover being provided with a flange adapted to engage the body telescopically and with an annular shoulder within the flange adapted to engage the edge of the body and to extend inwardly therefrom.

Packaged Food Product and Packing Method, G. F. Salerno, Wilmette, Ill. U. S. 2,489,726, Nov. 29. A packaged food product comprising an elongated, flexible, moisture-resistant bag permanently sealed at one end and unsealed but folded over at its opposite end to protect the contents of the bag from atmospheric moisture, and an outer container for bag adapted to receive the latter with a closed end wall of container abutting the folded end of the bag for retaining same in folded condition.

Attachment for Bottle-Carrying Cases, J. C. Brodnax, Jr., Peoria, Ill. U. S. 2,489,742, Nov. 29. In combination with a bottle-carrying case having cross partitions therein forming separate cells, a U-shaped member adapted to be inverted upon the position of a broken partition.

Weight-Controlled Container-Filling Device, W. D. Hooper, Chicago, Ill. U. S. 2,489,776, Nov. 29. A container-filling device which comprises a platform scale having a movable scale beam adapted to be actuated by a container on the platform, a lifting means driven electrically, a flexible weight secured to the scale beam and to the lifting means, a material-supplying means controlled by an electric valve and an electric valve which, when energized, causes material to be supplied to the container.

Sealing Means for Cartons, M. G. Rodriguez, New York, N. Y. U. S. 2,489,817, Nov. 29. A carton comprising confining walls, partitions constructed and arranged to form cells within the confining walls, and having a separate sealing strip extending through the opening in cross partitions.

Device for and Art of Adhesively Attaching Labels and Other Sheets to Articles, G. W. vonHofe (to New Jersey Machine Corp., Hoboken, N. J.). U. S. 2,489,837, Nov. 29. A device for activating thermo-activatable adhesive coatings comprising a suction head having a carrying surface for supporting an adhesive-coated sheet, means for heating a predetermined portion of the carrying surface of said heat to activate a corresponding portion of said coatings in registry therewith.

Loading Machine with Rotatable Turret Having Flexible Receptacle Supports and Receptacle Engaged Valve Actuators, E. E. Franz (to Western Electric Co., Inc., New York, N. Y.). U. S. 2,489,878, Nov. 29. A loading machine comprising a turret, a circular arrangement of supports for hollow articles disposed at spaced positions thereon and means to rotate intermittently the turret to move supports and articles in circular path.

Self-Sealing Container, H. L. Totman, Belleville, Wis. U. S. 2,489,989, Nov. 29. A closure for containers comprising a plate having a central recessed portion and an inner wall, a plurality of air vents provided in inner wall, a resilient disk positioned in recess bearing upon inner wall for normally closing and sealing the air vents.

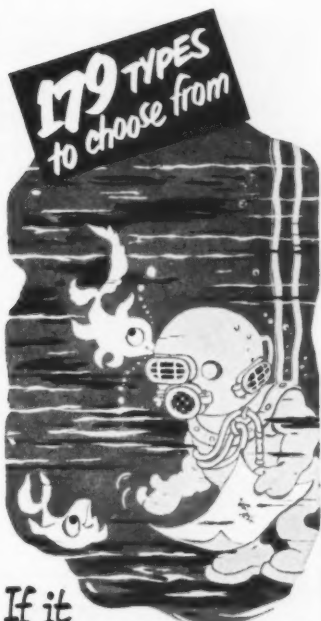
Method of Making an Infusion Package with a Non-tangling Handle and Tag, H. O. Irmischer (to National Urn Bag Co., Inc., a corporation of New York). U. S. 2,490,057, Dec. 6. In a method of manufacturing flat-sided infusion packages of folded-over sheet material formed with heat-sealed joint seams enclosing a product, the steps of heat sealing a top-closure joint seam in the edge border of the package sheet material and stapling a free end of a string handle terminated by a tag for anchoring said free end to top closure-joint seam.

Machine for Applying Adhesives to Bottom Surfaces, W. E. McDonald, Salt Lake, Utah. U. S. 2,490,077, Dec. 6. Machine

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U.S. Patents Digest

(Continued)

for applying an adhesive substance in parallel strips to the bottom surface of a body such as a box, comprising a plurality of applicator means adapted to supply said adhesive substance.

Bicycle Package, P. J. Yarman (to The Ohio Boxboard Co., Rittman, Ohio). U. S. 2,490,186, Dec. 6. In a bicycle package comprising a packaging container having top, bottom, end and side walls, spacing and blocking members for a bicycle enclosed by said container, said members including a cradle member interposed between one wheel of the bicycle and the bottom wall of the container, a frame-engaging member interposed between frame parts of the bicycle and the top wall of the container.

Carton, W. H. Inman (to Bloomer Bros. Co., Newark, N. J.). U. S. 2,490,133, Dec. 6. A carton made of foldable, fibrous, sheet material and comprising a blank reversely folded upon itself adjacent its center and having folded center adhesively secured and sealed between its opposite ends to provide inner and outer sets of carton side walls and having extensions on side walls providing flaps.

Box, J. Stone, Chicago, Ill. U. S. 2,490,557, Dec. 6. A box comprising a cover section having a wall portion provided with a recess and keeper tabs adjacent to and in spaced relation with respect to the recess, a preformed handle for said box comprising a hand-grip portion adapted to be received by the recess and having raised portions on opposite sides of the hand-grip portion beneath which the keeper tabs are adapted to be positioned.

Shipping and Display Box Hinge Construction, A. J. Carpenter, Jr. (to Babcock Box Co., Inc., Attleboro, Mass.). U. S. 2,490,746, Dec. 6. A rectangular box having cover and body portions made of flat, thin, structurally weak material, said portions each comprising a flat base and flat walls substantially vertical thereto, the walls of the two portions abutting each other edgewise, a reinforcing and connecting unit for portions consisting of a pair of flat strip-metal frames, one for each portion.

Container Closure, G. C. Erb (to American Can Co., New York, N. Y.). U. S. 2,490,791, Dec. 6. An easily removable cap and pull ring of a continuous circular sheet, comprising a cap having a peripheral flange for sealing a container outlet.

Can, H. Sebell (to Bell Products Corp., Boston, Mass.). U. S. 2,490,888, Dec. 13. A can comprising a can body, a collar element positioned within the can body near its top and secured to the wall thereof, collar element being made of sheet metal bent to present an outer vertical cylindrical wall in engagement with the wall of the can body.

Heat- and Pressure-Appling Apparatus, J. Marziani, Philadelphia, Pa. U. S. 2,490,915, Dec. 6. Apparatus including a frame, a first jaw fixedly carried by frame, a movable arm, a second jaw carried by one end of arm in registration with first jaw and a first rocker member carried by frame means pivotally connecting the other end of arm to first rocker member, an operating lever and means connecting lever to frame.

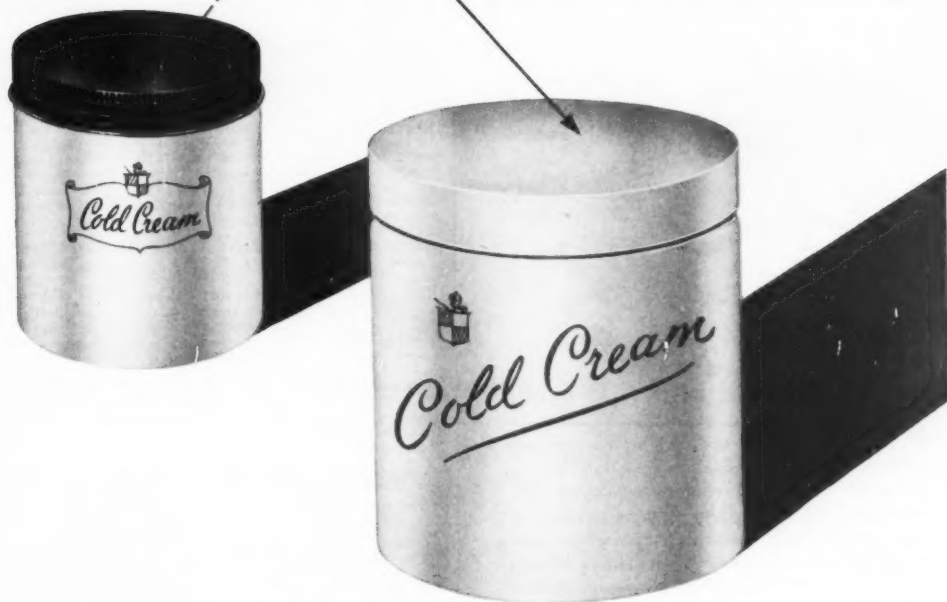
Method and Apparatus for Forming Tubes from Sheet Material, D. C. Thompson (to American Viscose Corp., Wilmington, Del.). U. S. 2,490,930, Dec. 13. A method of forming a tube from a sheet comprising the steps of forwarding the sheet through a path, forming the sheet into a flattened tubular structure by overlapping the edges of the sheet at a point intermediate of the edges of the flattened structure and continuously introducing a potentially adhesive strand between the overlapped edges.

Method of and Means for Forming and Filling Bags, W. J. Barker, Fort Worth, Tex. U. S. 2,490,940, Dec. 13. The continuous method of producing bags which includes pulling a length of flattened, preformed, tubular bag material upwardly while suspending it from its free end, spreading the suspended material into tube form prior to severing it and while pulling it upwardly.

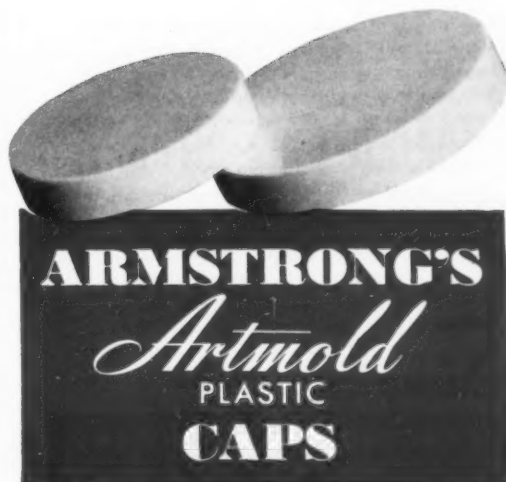
Apparatus for Weighing and Sorting Articles, W. H. Carruthers, Warrenton, Ore. U. S. 2,490,945, Dec. 13. A machine having, in combination, a series of weighing members, means for continuously moving articles in weighing relation to weighing members so that the articles pass from one member to the other.

Carrier for Bottles or Like Articles, V. Fortunato (to Morris Paper Mills, Chicago, Ill.). U. S. 2,491,039, Dec. 13. A carrier formed from a foldable paperboard blank, scored and cut to provide a handle portion, a pair of upwardly extending and

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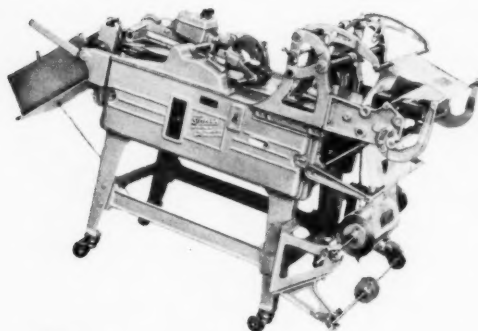


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oppositely disposed side panels, a bottom panel connecting the bottom edges of side panels and a substantially straight retaining element located adjacent each free edge portion of the bottom panel.

Automatic Scale for the Weighing of Poured-Out Substances, M. K. Johannessen, Bergen, Norway. U. S. 2,491,049, Dec. 13. An automatic feed scale for the weighing of granular and liquid materials in predetermined quantities having a balance beam, a plurality of electromagnetic-operated pivotable cocks, a switch for each of said cocks and actuated by said balance beam for progressively and step-by-step closing the outlet of material to be weighed.

Automatic Weighing Machine, L. R. Muskat (to Triangle Package Machinery Co., Chicago, Ill.). U. S. 2,491,056, Dec. 13. In an automatic weighing machine, means for bulk feeding a commodity and means for dribble feeding said commodity.

Bottle Carrier, E. L. Arneson (to Morris Paper Mills, Chicago, Ill.). U. S. 2,491,149, Dec. 13. A paperboard carrier comprising integrally connected side walls, a bottom and a suspending handle integral with walls, handle being disposed medially of and extending substantially above walls and being provided with a longitudinally extending, creased, fold line located with respect to the vertical dimension of the carrier.

Valve Bag, J. Johnsson (to Billeruds Aktiebolag, Saffle, Sweden). U. S. 2,490,966, Dec. 13. In a valve bag having its valve formed by folding in a corner of the bag, a tube of relatively pliable and bendable material attached in said valve and projecting a short distance therefrom, tube forming with the bottom of valve a blind valve, and a tongue of relatively stiff material resistant to the bending and approximately in the form of a segment of a circle.

Collapsible Shipping Case, R. C. Potts, Takoma Park, Md. U. S. 2,491,206, Dec. 13. A unitary collapsible shipping case having a body, the external walls of body being of double thickness, the thicknesses of one side wall being spaced apart a distance equal to one thickness of material, the outer thickness of the side wall opposite thereto being extended to form top and bottom closure panels for box body.

Tube Closure, J. J. Robinson, Jr. (to Marsh Wall Products, Inc., Dover, Ohio). U. S. 2,491,213, Dec. 13. A closure for shipping tubes comprising a substantially cap-shaped, sheet-metal bung having a bottom wall with an upstanding peripheral flange thereon and spaced upwardly, disposed extensions upon the flange and out-turned prongs at the ends of extension whereby the bung may be driven into the end of a tube.

Machine for Sealing Filled Bags, E. C. St. Jacques and R. H. St. Jacques, Wareham, Mass. U. S. 2,491,226, Dec. 13. An apparatus for sealing filled bags comprising a conveyor for delivering filled bags singly to a sealing station and having a motor driving connection between the motor and the conveyor, including a conveyor-operating clutch, and provided with bag sealer and sealing station for sealing each bag as it is delivered thereto.

Tablet Box, L. Hermani (to Continental Can Co., Inc., New York, N. Y.). U. S. 2,491,264, Dec. 13. A tablet box comprising a body and a cover, each having rear, front and side walls integrally connected to a top and a bottom, with the cover engaging over the body walls, said cover having a fulcrum support on each of the side walls of the body on which fulcrum support the cover rocks during the initial opening thereof.

Packaging Apparatus, J. F. Stalter (to Wingfoot Corp., Akron, Ohio). U. S. 2,491,424, Dec. 13. Packaging apparatus with its top hinged to its bottom, heating means over substantially the entire inner surface of the top, the bottom being divided into substantially equal parts with holes in each arranged symmetrically with respect to the line dividing the parts, one of the parts being permanently held in the bottom half and the other hingedly mounted so that it may be folded over on to the permanently mounted half.

Flanged Container Construction, W. Tamoschat (to Daniel D. Zell, New York, N. Y.). U. S. 2,491,426, Dec. 13. A container having an inner frame member provided with a continuous side wall and a laterally and outwardly extending flange; an externally positioned encircling frame member forming an open aperture within which aperture the continuous side wall of the inner frame member is seated.

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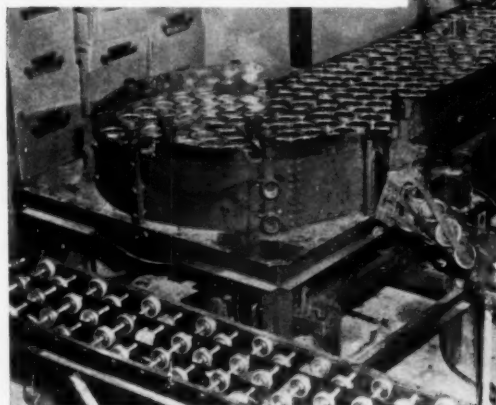
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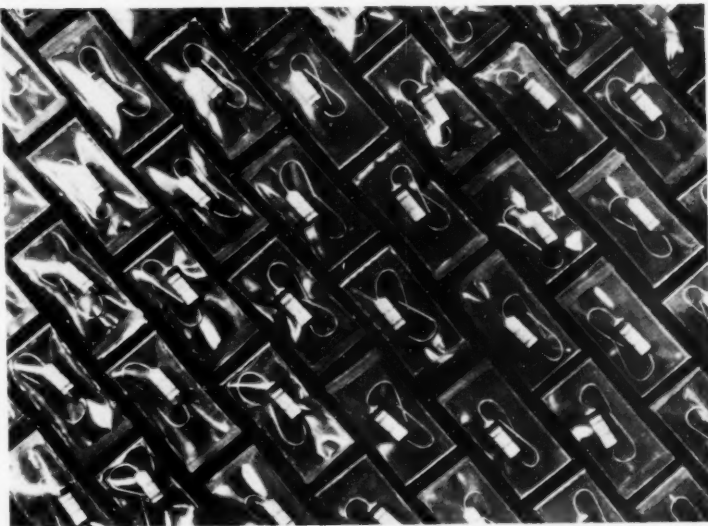
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This statement is used by The Nestlé Company, Inc., in advertising its soluble coffee product, NESCAFÉ®. And to make certain that the quality of Nescafé® is as "right" when it reaches the consumer as it is when packed. The Nestlé Company, Inc., gives this product *double* protection.

First, there's the dependable Crown Screw Cap. This cap not only has the patented Deep Hook Thread which gives greater sealing pressure, but also has a liner which has been carefully selected for maximum sealing efficiency on this product.

Remove the Crown Screw Cap and there's INASEAL . . . the inner seal that gives extra protection against evaporation, moisture, tampering and sampling because it adheres to the lip of the jar. INASEAL is available in a variety of materials to meet the specific sealing requirements of individual products.

A Crown Representative will gladly supply full information about this efficient combination as well as any facts you may want about its installation in your plant. Crown Cork and Seal Co., Baltimore 3, Md. *World's Largest Makers of Metal Closures.*



CROWN CLOSURES

Approved by millions of housewives

British packaging team sails

Carrying brief cases stuffed with notes gathered during a 25-day tour of 52 American packaging plants, the 13-man "productivity team" of British packaging specialists sailed for home late last month, ready to put their findings to work to improve Britain's salesmanship in world markets. Their tour here was sponsored by the Anglo-American Council on Productivity, the British Government and the Economic Co-operation Administration of the U. S. Government.

At a New York press conference just prior to their departure, the British experts summed up their impressions of American packaging. They evidenced great respect for the American talent in mechanization and mass production, as well as package design.

George Ashwell, chief of the British mission, said he felt that the best of British packaging was as good as America's best, but that the average was not as high. While pointing out

that materials shortages still hampered British packagers, he said that one of the great lessons that the group was taking back was the need for what he called "flash appeal"—the ability of a package to identify and sell itself at a moment's glance. He said it was evident that British package designers must learn to be both salesmen and artists, as they are in the U. S. Pointing out that there was no lack of interest in packaging in England, Mr. Ashwell cited the attendance of 30,000 at the first National Packaging Exhibition ever held in Great Britain last fall—well beyond the highest that America's packaging show has ever drawn. Their Institute of Packaging has 800 members, he said.

Some members of the British team said they planned to press for lowered barriers to permit freer import of American packaging machines.

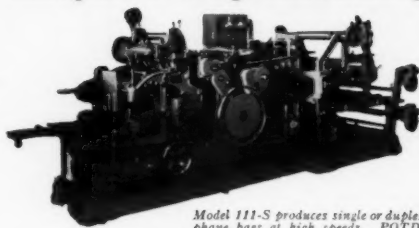
Dr. George Riddell, research director of the Printing, Packaging & Allied Trades Research Assn., estimated that

there was about 10 times as much packaging research conducted in this country, particularly by the smaller package users and supplier companies.

Canners show

The 1950 Canners Show and its four attendant conventions drew crowds estimated as high as 20,000 to Atlantic City last month. The show itself had 130 exhibitors—a record number—and interest was reported particularly keen in mechanical improvements promising lowered costs while maintaining quality. Typical of packaging advancement was the showing of a new jar-capping machine capable of 625 jars a minute—almost double the previous highest rate, it was said. The show, as usual, was sponsored by the Canning Machinery & Supplies Assn. Also meeting in conjunction with the show were the National Canners Assn., the National Food Brokers Assn. and the National American Wholesale Grocers Assn.

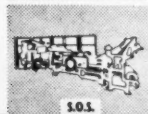
POTDEVIN Cellophane Bag Machinery



Model 111-S produces single or duplex cellophane bags at high speeds. POTDEVIN patented compensator and "electric eye" controls register of pre-printed cellophane.



ANILINE PRESS



S.O.S.

Models include flat-and-square and satchel-bottom bag machines for all popular sizes. The lip on POTDEVIN-made bags makes them especially adaptable to operation on automatic filling machines. Method of cut-off prevents "fusing," side splitting or corner splitting. Cellophane aniline presses also available.

Consult our engineers on any problem. No obligation. Literature on request.

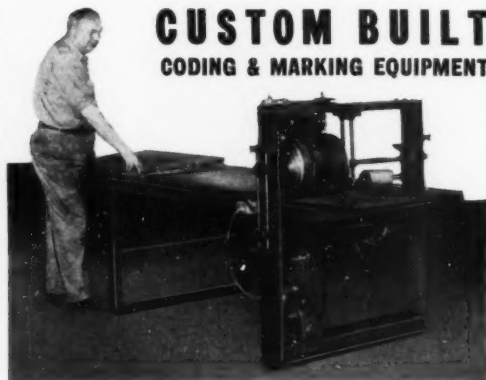
POTDEVIN MACHINE CO.

1244 38th St., Brooklyn 18, N. Y.

Designers and manufacturers since 1893 of equipment for Bag Making, Printing, Coating, Gluing and Labeling.



CUSTOM BUILT CODING & MARKING EQUIPMENT



Model No. 7 automatic carton imprinting machine

Throw away your slow, outmoded hand stamps and stencils . . . you won't need them once we build an efficient marking or coding unit, designed specifically for your operations.

Special coding and imprinting machines—

- loaded cartons
- set up boxes
- wooden box shoos
- flat cartons
- fiber drums
- multi-wall bags

These high speed imprinters use quick drying, non-caking inks and insertable rubber type which needs no makeready. Each machine can be made adjustable through a wide range of package sizes.

Outline your problem in a letter for design recommendations.

INDUSTRIAL MARKING EQUIPMENT CO. INC.

7 East 48th Street

Dept. MP

New York 17, N. Y.

PLaza 3-4644

NOW-POLYTHENE FILM

By the Makers of Du Pont Cellophane

AVAILABLE IN BOTH SHEETS AND ROLLS

USE DU PONT POLYTHENE FILM
when you need a packaging material that is

- Tough, strong, flexible
- Light-weight
- Chemically inert
- Highly resistant to water
- Moisture-vaporproof
- Non-toxic; suitable for use on food products
- Long-lasting—permitting re-use
- Sealable by heat, sewing and adhesives

Some of the ways POLYTHENE FILM is used:

By the frozen-food industry for packaging that stays tough and strong at sub-zero temperatures.

By drug and chemical makers, to make containers for delicate, corrosive and hygroscopic chemicals.

By metal parts manufacturers to provide durable, moisture-vaporproof packaging for bearings, hardware items, etc.

By the textile industry for packaging sheets, towels, lingerie, bolt goods, children's wear, etc.; also for garment bags and covers, tablecloths and other fabricated items.

HAVE YOU INVESTIGATED DU PONT POLYTHENE FILM?

The remarkable properties of this film offer many sales and protective advantages. Write today for samples and technical data. Polythene Film Section, Cellophane Division, E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Del.

Du Pont Polythene Film



BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

FEBRUARY 1950

**Improved process gives this versatile film
greater uniformity of gauge . . . better
machine operation, handling and printing**

To extend the field of usefulness of transparent film, the Cellophane Division of the Du Pont Company now offers Polythene film . . . in both roll and cut-to-size sheet form, with improved service characteristics.

Du Pont Polythene film is tailor-made for many requirements. You can get it in gauges ranging from 150 to 400; .0015" to .004" thickness; and in widths up to 56 inches.

Polythene film from Du Pont has improved uniformity and freedom from pinholes. You'll get better results in machine operation, handling and printing.

When you use Du Pont Polythene film, you benefit by an exclusive method of processing developed by Du Pont packaging specialists, who have over 25 years experience in producing transparent films.

Du Pont Polythene film also can now be obtained from converters in both printed and bag form.

USE THIS CONVENIENT COUPON

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Cellophane Division
E. I. du Pont de Nemours & Co. (Inc.)
Wilmington 98, Delaware

Please send me samples and information on Du Pont Polythene Film.

Name _____

Company Name _____

Address _____

City _____

State _____

Maritime Assn. export packaging report

A surprisingly large number of shipments for export arrive at piers already damaged or so poorly packed that it is not reasonable to expect good out-turns, according to a report by the Packaging Committee of The Maritime Assn. of the Port of New York.

The Packaging Committee, appointed last February to determine and recommend what action can be taken to solve the deficiencies in American export packaging, reached this decision after completing the first phase of its survey in the world-wide study of export packaging. Its report is based upon an analysis of outbound cargoes for 20 vessels of 19 companies, under seven flags, plying 11 trade routes extending all over the world.

While there are pier and handling conditions which it is unreasonable to expect a package to withstand, the report states, some shippers endeavor to get the steamship companies to ac-

cept packages which they know railroads would refuse. Shippers are not expected to do the whole job, but export packaging must be done right—and it need not be expensive. If the packaging is well planned and well done, according to the committee, it will be the least expensive way.

The commodity groups with the highest number of insufficiently packed shipments for export were listed as follows: glassware and empty bottles, textiles (piece goods and finished products), automobile parts, food, kitchenware, toys, household appliances, plastics, chinaware, agricultural equipment, furniture, packaging materials and cosmetics.

When reviewed by container types, considering the figures in relation to the total number of shipments in each type of container, the containers were listed as follows, starting from the poorest: cleated plywood boxes (usually second hand and overloaded), open crates, corrugated (usually with

poor closures, poor interiors and no straps), sheathed crates (horizontal sheathing or poor framing), wire-bound boxes (second hand or of improper size), bundles, nailed wood boxes and solid fibre cartons (poor closures).

Several hundred detailed out-turn reports have been received on the cargo and the information is now being correlated and interpreted so that analytical summaries and charts can be prepared. A public report will be made on this phase of the study as soon as it is completed. It is also planned to communicate with as many shippers as possible whose packing was found to be inadequate or insufficient.

When the program is completed the committee will report its findings and recommendations to the president of the Maritime Assn. of the Port of New York. The establishment of a permanent Packaging Bureau to render technical service to shippers and carriers will depend to a large extent, according to the association, on the findings of the committee.

take a **CLEAR VIEW**
of the Future



For example, take this plastic, tarnish-resistant "step-up" chest for children's silverware . . . molded by Kirk for International Silver. A clean break from traditional wooden chests, it still preserves the product's dignified elegance . . . adds eye appeal and protective features.

Kirk's ability to mold merchandising magic into clear-view and other plastic containers is paying off for International Silver. It may pay off for you. Write for Information.

F. J. KIRK MOLDING Co.
CLINTON, MASS.

Packard
presents

**TWO ROUND
CONTAINERS**



IDEAL FOR FOOD PRODUCTS

Housewives acclaim the easy-operating dispensers on these Packard spiral wound containers. The small container has a push-in closure which allows the proper amount of grated cheese to be shaken out. The large container has a completely sealed, readily opened revolving top, perfect for breadcrumbs and other granular products. This closure is very inexpensive and any size and number of sifter holes are possible.

Many other closures and low cost spiral wound containers are made by Packard. Various metal end and paper end styles are available in all diameters and lengths. Want samples suitable for your products? . . . Tell us what you make.

Packard Container Corp.

286 GRAND STREET, HOBOKEN, NEW JERSEY
PHONE HOBOKEN 2-1970
NEW YORK CITY TELEPHONE WH-3-0684

WORLD'S MOST POPULAR automatic tube filling machine

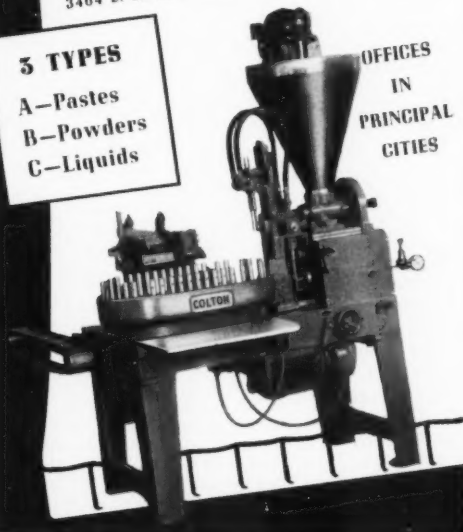
Colton No. 17 machine for filling pastes, creams, fluids, powders, handles any size tube from 1/2" x 2" to 1 1/2" x 7". Fills up to 80 a minute with no air trapping, no wiping. Produces Colton Clipless Closure. Quickly adjustable to various sizes. One operator adequate. Compact, thrifty, dependable. Write us about your packaging project—our 65 years' experience is at your service.

ARTHUR COLTON CO.
DIV. SNYDER TOOL & ENGINEERING COMPANY
3404 E. LAFAYETTE AVE. • DETROIT 7, MICHIGAN

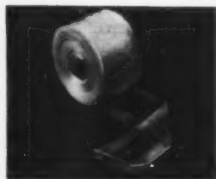
3 TYPES

A—Pastes
B—Powders
C—Liquids

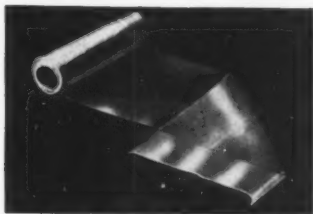
OFFICES
IN
PRINCIPAL
CITIES



POLYETHYLENE



PACKAGING FILM



from the West Coast's only producer

Here are a few of the products now packaged in polyethylene film:

ball bearings
cakes
candy
chemicals
clothing
cookies
cosmetics
dairy products
fertilizers
fresh foods
frozen foods
meats
metal parts
peat moss
pharmaceuticals
poultry
powdered foods
putty
silverware
sporting equipment
vegetables

A top quality product and fast service are what western users of polyethylene packaging film demand. And they get exactly that from Extruders, Inc., the West Coast's sole extruder of this new, amazing packaging film.

Polyethylene film fills the demand for a packaging material with chemical inertness, lightness of weight, toughness, tear-strength, low-temperature flexibility, heat sealability, water vaporproofness, and freedom from taste, odor and toxicity.

Standard widths and gauges stocked for immediate shipment:

Widths	3" to 54"
Gauges	1 1/2 to 8 mils
Shapes	layflat tubing gusseted tubing flat film (single ply)

Also available, on special order, in colors (opaque or transparent) and in special widths and gauges.

OTHER PACKAGING FILMS

Extruders, Inc. is the prime West Coast supplier of extruded packaging films made of vinyl, acrylonitrile vinyls and S-polymers.

Write for Price List Now



EXTRUDERS, INC.

8509-15 Higuera Street Culver City, Calif.

*Searching for the
perfect solution to
your Packaging
Paper Problem?*



Look at the

MATTHIAS LINE

The very paper for which
you are searching may
be right in our stock.

*Over 1,000 Packaging
Papers to choose from.*

**MATTHIAS
PAPER
CORPORATION**

165 W. Berks Street,
Philadelphia 22

The smaller package

(Continued from page 78) getting under way in prewar years. The war years must be discounted, inasmuch as Tin Conservation Order M-81 prohibited the use of tin for small containers. The trend has appeared again postwar, says NCA, as revealed by comparisons of bulletins for 1940 and 1948. The trend which became evident in the 1948 record was considerably marked in 1949, although all pack figures for last year are not yet compiled.

The same trends are being observed by the Grocery Mfrs. of America, which finds that the small container for the family of two is preferred in large cities. GMA, however, last year found few food producers offering complete lines in small containers, probably due to the belief on the part of packers that such packages find their largest demand when prices are high.

The reasoning is that if food prices decline, packers may not extend their small-container packaging as rapidly as they have during the past few years of high prices.

Lithographers who supply can labels are in a good position to watch the trend in container sizes and have supported the observation that there is a strong leaning toward the continued packaging of smaller consumer units, due to the changing population, living and shopping habits, and proximity to stores.

Small sizes are not without criticism on the part of some packers and wholesalers because of the growing number of odd sizes and grades they must handle and the expense of packaging, labeling and selling large assortments—yet they admit they have no answer to the question of how to stop the growing trend of consumer preference.

Experience during the last half century has been that smaller and smaller packages have led to increased markets and increased sales. It is our guess that the trend will continue for some time to come. Wise manufacturers will always adopt those container sizes which have been properly planned for the preferences of their customers.

Smorgashbord girl

(Continued from page 120) on the printed tags for Scandinavian-style home-made sausage, which carry the company name and trademark on one side and cooking instructions on the other, and on heat-sealing wiener bands, which are fed from a roll and applied by special equipment which is supplied to them by the label manufacturer.

Bands for the wieners still carry the old airplane trademark, but will be switched over to the new trade figure as soon as stocks currently on hand are used up.

Prominent use of the new trade character throughout the Scott Petersen promotional program has given the company's entire sales effort new unity and focus. However, through careful planning, costs have been held to a minimum, in line with a modest advertising budget. Small newspaper ads worked up from the package designs have been enlarged for use in retail trade publications and also "blown up" into effective store poster displays.

Following this principle further, logos were blown up from package designs into truck decals, so planned that they could also be used for store fronts or interior display.

Also used are miniature decals for store doors and meat cases to keep the company name before the customer directly at the point of sale.

CREDITS: Complete design program, Norbert F. Schwarz, Chicago. Folding cartons, Morris Paper Mills, Chicago. Parchment wraps, Kalamazoo Vegetable Parchment Co., Kalamazoo, Mich. Cel-O-Fold cartons and Presto-Pak unit for setting up cartons, The Interstate Folding Box Co., Middletown, Ohio. Acetate liners, "Lumarith," Celanese Corp. of America, New York. Printed casings, Visking Corp., Chicago. Kartridg-Pak wiener bands and banding unit, Marathon Corp., Menasha, Wis. Waxed paperboard tubs, Continental Can Co., Mono Containers Div., Newark, N. J. Slip-cover cans for pork sausage, American Can Co., New York. Printed tags, Dennison Mfg. Co., Framingham, Mass. Decalcomanias, The Meyercord Co., Chicago.

FLEXIBLE MEANS A LOT OF THINGS:



Truly squeezable bottles and containers have taken the packaging field by storm—for a storm-cellar-full of reasons!

Made of shatterproof, inherently flexible BAKELITE Polyethylene Plastics, they now give packages a new function—*performance!*

And these amazing plastics are inert, tasteless, odorless, non-toxic, and extremely resistant to chemicals—including strong acids, alkalis and moisture. The squeezable bottles and jars illustrated made by Injection Molding Co., Kansas City, Mo., are typical of dozens of applications of BAKELITE Polyethylene for packaging cosmetics such as deodorants, skin balms, toilet waters.

Maintaining their flexibility at temperatures far below zero, BAKELITE Polyethylene Plastics are making many other new types of containers and packages possible. Lighter even than water, they are saving shipping costs—and reducing breakage to the vanishing point. They come in many colors, either deep tones or delicate pastels.

For complete data on forms, properties, and applications of BAKELITE Polyethylene Plastics, call on us. Bakelite has been in the plastics business for forty years, and our accumulated engineering experience is at your service. Write Dept. HO-55.

* Eastern distributors:
J. W. Wilson Glass Co., Inc., 55 No. 4th St., Brooklyn, N. Y.

*But for
Containers
it means...*

Bakelite
TRADE MARK
Polyethylene
PLASTICS



Visit the National Plastics Exposition, Navy Pier, Chicago, March 28-31

BAKELITE DIVISION, Union Carbide and Carbon Corporation, 30 East 42nd Street, New York 17, N. Y.

PACKAGE
WITH

ACMEFLEX®

*new and
decidedly superior materials!*

USED FOR

PACKAGING

DEHYDRATED &

FROZEN FOODS,

LIQUIDS, CHEMICALS,

DRUGS, TOBACCOS, ETC.



ACME BACKING CORP.

MEADOW & BOGART STS.

BROOKLYN 6, N. Y.

1. Makes gas, liquid, and grease-tight packages on high-speed equipment.
2. May be hermetically heat-sealed.
3. Protects against light, loss of flavor, contamination.
4. Low moisture vapor transfer.
5. Inexpensive.
6. Can be cooked or sterilized after packaging.
7. Printable.
8. Completely inert, non-toxic.
9. Odorless and tasteless.
10. Very high ratio of seam and body strength to weight.

Write for samples.
Technical data and engineering
consultation available without
cost or obligation

Tomato films

(Continued from page 126) 85%. Keep ripening rooms clean and free from mold. Ripen tomatoes to pink or red before packaging.

Conclusions

Delivery of satisfactory pre-packaged tomatoes to the consumer can be assured by:

1. Packaging top-quality pink or red tomatoes with maximum visibility in the package.
2. Using intermediate or high water-vapor-permeable films for packaging.
3. Providing adequate ventilation of the packages.
4. Maintaining quality at the retail level by rigid inspection.

References

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Glass Institute

The Glass Container Mfrs. Institute, which represents 98% of the nation's bottle and jar producers, will spend \$1,000,000 during 1950 to promote the one-way, no-return beer bottle throughout the country. Benjamin Wood, marketing director of the Institute, said that a "substantial part" of the budget would be spent on a concentrated advertising schedule. Consumer advertising, to be concentrated in 40 of the nation's important beer markets, will be based on the "quality-economy" theme. The success of their merchandising program last year prompted the institute's decision to intensify promotion of the one-way beer bottle during 1950.

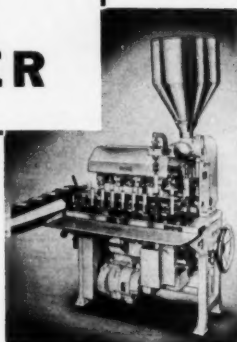
500 NORTH CANAL STREET, CHICAGO 6 • 595 FIFTH AVENUE, NEW YORK 17

181

ARENCO TUBE FILLER

World's *only* filler that features
tube cleaning and cap tightening
...and now both in one station.

Fills, closes, seals and codes up to 55
tubes per minute. Easily cleaned—
only stainless steel and Monel used in
parts contacting the material filled.

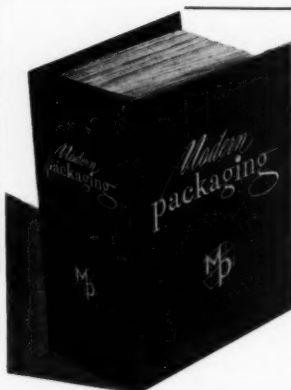


- Automatic tube cleaning and cap tightening before filling
- Fills all materials—free-flowing to non-flowing
- Fat or fishtail filling—single, double or triple fold, without clip
- No tube, no fill. Quick change over of materials and sizes
- Turret attachment for filling jars
- Send *now* for details, illustrated folder



THE ARENCO MACHINE
COMPANY INCORPORATED

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For subscribers to
MODERN PACKAGING...
this handsome 12 issue binder

Simplifies Filing
Makes Reference Easier!
Prevents Loss of Back Issues!

In at least one respect, our research shows, 'most all MODERN PACKAGING readers are birds of a feather—they hang on to back issues for dear life. Chances are you, too, find frequent occasion to look up an old issue for quick answers to current packaging problems.

And that's undoubtedly why we've been flooded with requests for a durable, easy-to-use binder to keep those back copies from disappearing, straying or becoming tattered and torn. At long last we've come up with the answer you see in the picture. This binder is tough and rigid and built to last. It's covered with rugged, pebble-grained, blue Fabrikoid. It's handsomely gold lettered. It's riveted and reinforced with heavy metal. And, wonders of wonders, it's got a specially designed "lock-em-in" device that makes the job of inserting issues fast and easy.

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Gentlemen:

Ship me immediately one MODERN
PACKAGING binder. I am enclosing
(☐ Check ☐ Money Order) in the
amount of \$2.50 as payment in full.

Name

Address

City Zone State

Testing wax seals—

(Continued from page 129) with a standard wax. Each value was obtained using paper from a different stub roll. All the stub rolls were cut from one large roll.

Discussion

In most laboratories the preparation of waxed paper for a sealing-strength test does not duplicate the conditions attained by machine-waxed paper for commercial use. With this in mind, a test method should eliminate or reduce to a minimum the effect of as many variables as possible. The results of experiments conducted have shown that waxing temperature and moisture content of the paper before waxing for normal laboratory conditions do not affect sealing-strength values. Hand waxing of paper produces an uneven film of wax, which results in erratic sealing-strength values. If the paper is placed in an oven to allow the excess wax to drain off, reproducible results are obtained. It was found that 7 to 10 min. at 200 deg. F. resulted in a uniform wax-film thickness. Oven treating also adjusts the humidity content of the paper to a common level, thus minimizing the effect of moisture content. Aging time after oven treatment results in a gradual increase, but is within experimental error if the test is completed within 1 hr. after oven treating. Although sealing strength increases with sealing temperature, the increase between 200 and 250 deg. F. is only 8%. Therefore, sealing-strength values are well within the limits of experimental error when small changes of plate temperature occur at 200 deg. F.

No method of known accuracy was available for comparison with this method. The mean deviation from the mean of 60 tests was found to be less than 5% after correcting for deviation in results due to paper differences.

In addition to evaluating straight paraffins, this method has been used to compare the sealing ability of wax blends and to evaluate wax additives. Not only can tests be made on laboratory-waxed samples, but this same instrument has been useful in comparing machine-waxed samples. In this use, commercial machine-waxed samples are sealed together between hot glass plates in the manner described for oven-treated laboratory-waxed sam-



Duraglas bottles are functioneered to suit housewives and sales managers!

GIVE A Work-a-Day Product A NEW SALES LIFT!

Dress it in a Duraglas bottle—pick from more than 1400 styles "functioneered" for easy handling . . . easy sales

HOUSEWIVES are quick to spot the brands that offer the little extra conveniences that lighten their household tasks.

Want extra housewife favor for *your* product? Use one of the 1400 functioneered stock-mold Duraglas bottles. Ease of use is built right in: convenient pouring; shapes that fit

hands; smooth finish for positive closure seal; visibility that shows "what's left" at a glance.

If you prefer a custom-made container, our Duraglas Center facilities will develop one for you. Specialists will create a customer-appealing design, and it will be produced with the know-how that gives each

Duraglas bottle strength where needed, toughness at the right places, and day-after-day dependability on your filling line.

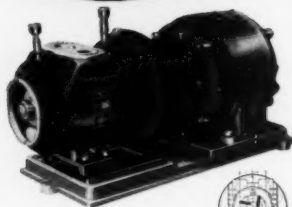
For everything from bottles to closures and shipping cartons, get in touch with Owens-Illinois. The local office near you will supply prompt service.

Duraglas Bottles are Protectors of Quality

TRADE MARK REG. U.S. PAT. OFF.

OWENS-ILLINOIS GLASS COMPANY • TOLEDO 1, OHIO • BRANCHES IN PRINCIPAL CITIES

NEW KRAISSL AIR PUMPS for SUCTION and PRESSURE



Eliminate Oil Vapors from Discharged Air

The new Kraissl Class 23 pumps completely eliminate undesirable oil vapors from discharged air. In many operations, this means a tremendous saving to you—in time, materials and industrial health. Pumps are dry lubricated—displacement blades take up their own wear. Positive, fan-cooling for continuous high performance. Available with double extended shaft for group installations from single power source. Performance data: 1750 RPM, but not limited to this speed. Capacities from 5 cfm—20 cfm, for single units; larger capacities by group drive.

Kraissl Class 23 pumps are specifically designed for all packaging and printing machinery; and similar applications where air pressure or suction, without discharge oil, is preferable.

- Suction feed or pick-up of paper, cardboard, tin, etc.
- Container-filling: bags, bottles, tubes, etc.
- Automatic handling on conveyor systems
- Packing in shipping crates and cases
- Printing presses and vacuum printing frames
- Vacuum canning machines
- Vacuum holding chucks
- Ideal for handling food products, beverages, pharmaceutical preparations—where rigid sanitation standards are mandatory.

FREE

Write today for our new Bulletin A-1399 on Class 23 Air Pumps.


Kraissl Co. Hackensack, N. J.
Please send your bulletin A-1399 to-day to:

Name _____

Name of Company _____

Address _____

City _____ State _____



KRAISSL CO., Inc.
309 Williams Ave., Hackensack, N. J.

ples. The force required to separate the heat-sealed sheets is measured by means of the same sealing-strength tester. An important use that has been made of this sealing-strength tester is the investigation of customer complaints.

Conclusions

This test method permits the determination of sealing strength of different grades of paraffin waxes and values can be correlated with results found in commercially waxed paper. With usage, a minimum sealing strength can be established that will result in satisfactory seals for bread-wrap paper.

Acknowledgment

The authors desire to express their appreciation to E. W. Gardiner, California Research Corp., San Francisco, Calif., for his technical assistance. This original design of this sealing-strength tester should be credited to D. L. Shinn, Central Research & Technical Dept., Crown Zellerbach Corp., Camas, Wash., where a similar instrument has been in use for over 12 years.

Literature cited

- (1) du Pont de Nemours and Co., E. I., Brit. Patent 529,399 (Nov. 20, 1940).
- (2) Padgett, F. W., *Oil & Gas J.*, 38, 30 (Feb. 3, 1938).

Australian shows

The success of the first Overseas Packaging Exhibition held in December at Melbourne, Victoria, by the Dept. of Commerce & Agriculture of the Government of the Commonwealth of Australia is attested by the fact that a similar exhibition in Sydney, New South Wales, is now being planned for the near future by the same agency.

Over 2,000 manufacturers, distributors and other businessmen attended the exhibit, which was limited to trade guests so that Australian manufacturers would have the fullest opportunity to examine thoroughly the various exhibits.

Several packaging manufacturers from the United States, as well as Australia, Britain, India and South Africa, participated in the show. The Australian Government Trade Commission reports that the American products aroused great interest among the visitors.

CUSTOM LAMINATING AND COATING

**Films, Foils,
Fabrics, and
Papers for
all purposes
Plus
these Standard
Products**

FUNCTIONAL:

Heat Sealing Foils
Heat Sealing Tapes
Barrier Materials,
Greaseproof
Barrier Materials,
Moisture vapor proof
Jar Cap Liner
Electrical Insulation
Laminated Foil and
Board
Locker Paper

DECORATIVE:

Foil Paper, colored
and embossed
Acetate to paper
in colors
Leatherette

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PLASTIC CONTAINERS

Beautify Your Products

STIMULATE SALES TO INCREASE YOUR PROFITS

It's as simple as that. If you want the ultimate effect at point of sale, package in Clearsite—your product's inevitable container.

Clearsite containers may be had flexible or rigid • Clearsite is seamless, shatterproof. Clearsite is feather-light, weighs only 1/5 as much as glass. Clearsite is available crystal clear and in gemlike colors as well as opaque. Of particular importance: Clearsite containers can be permanently imprinted with your company name, trademark, address and directions for the use of the product or material packaged.

Write for samples. Send product to be packaged, or give product size. We will return your product in Clearsite, together with a wealth of helpful information.

America's #1 Source for Plastic Containers • Established 1919

**ANILINE
Print
PRESSES**



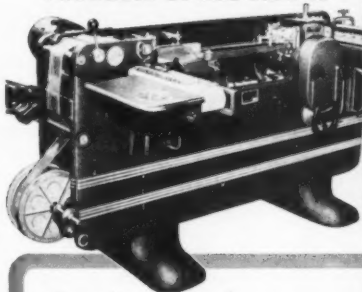
**PERFECT REGISTER
... TREMENDOUS SPEED**

THIS brand new No. A-4 aniline printing press offers perfect register at highest speeds on cellophanes, foils, and other materials your customers require for wrapping their products. Many other models in our complete line of presses are available for the aniline printer. Write us for complete detailed descriptions.

HUDSON-SHARP
MACHINE CO. • GREEN BAY • WIS

Packages—

PRODUCTS OF ALL SHAPES



TUBULAR



OVAL



OBLONG



IRREGULAR



BEVELED SIDES



FLAT

FRAGILE or solid—regular or irregular, this modern continuous feed wrapper delivers up to 150 units per minute, fully glued or heat sealed — and without breakage! Only one operator and one helper required. Also available with hopper feed for cylindrical products such as stick candy, etc. Saves time, money, labor and materials. Write for illustrated brochure and details.

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HUDSON-SHARP MACHINE CO. • GREEN BAY • WIS



IT would pay you to check your present marking systems, eliminating costly methods and doing away with old fashioned, unsightly marking.

MARKEM offers specific plans, machines and inks for more attractive package marking at lower cost. There is no waste due to obsolescence and no box inventory problems with Markem marking methods.

Since 1911 MARKEM has been solving marking problems and improving marking systems in every field, in every business, marking on paper, plastics, glass, fabrics and other packaging materials.

We would be glad to talk with you about your marking and furnish concrete examples of improved systems and cost reductions achieved in situations similar to yours.

Write, sending us samples of your present marking or ask to have our representative call. No obligation, of course.

Put your Marking problems up to MARKEM



Fragrance—

(Continued from page 79) for the other three groups holding the small 6-dram bottles are all of similar folding-box construction, but one is made to hold the entire 12 bottles, the others to hold six each. Covers lift up and are die-cut with oval-shaped windows to allow the bottle labels to show through.

Printed on the cover design are reproductions of the bottles, as though used as vases containing the flowers authentically reproduced. Decor color is green on a white background. Inner platforms are lavender. A die-cut arrangement for the inner platforms is said to hold the tiny bottles in place more securely than previous constructions.

With this packaging Gourielli has a line of popular-priced eaux de parfum for year-around and seasonal promotions, as well as gift items with a "personalized" appeal to the shopper.

CREDITS: Folding boxes, Warner Bros. Co., Bridgeport, Conn. Bottles, Carr-Lowrey Glass Co., Baltimore, Md. Closures, Victor Industries Corp., Brooklyn, N. Y. Labels, The Foxon Co., Providence, R. I., and Ar-Kay Printing Co., New York.

Cartoner

(Continued from page 84) instances or for some products.

Companies using one or more fully automatic machines for high-volume products are installing the new machine to handle one or more products of lesser volume. It is useful also where manufacturers are introducing new products with unknown sales potentials; until such time as assured volume justifies an automatic machine, the semi-automatic may be the most economical.

Many large packagers reportedly are planning to install one or more of the fully adjustable, wide-range machines for such special purposes, or to accommodate the short special runs which frequently are required on established products.

The new machine promises also to help newcomers to the packaging field—producing in short runs many items of many sizes—who could not afford the less-flexible automatic car-

No More Fussy Heat Sealing

when you use the
Easy, Sure
WELLS
THERMOSEALER



Style TF

For Cellophane, Lumarith and similar materials, use the Wells Thermosealer AS IS.

For Pliofilm, Polyethylene, Vinylite Cast Film, etc. the thin WELLSOLE is attached to the base of the Wells Thermosealer, Style TF.

The Wells Thermosealer solves the tricky problem of heat sealing. Now pre-packaging of all meats, vegetables, cakes, cheese, etc., is **EASY, FAST, LOW IN COST.** For Wells developed an **ADJUSTABLE** Thermostat that holds the temperature of the aluminum base within the close tolerance required for the given heat-sealing material. You get perfect package seals.

In devices where the temperature is not closely controlled, sealing is haphazard.

TRY IT FOR ANY HEAT-SEALING MATERIAL.

For 11 years the sturdily-built Wells Thermosealer has been used the nation over. It is reliable, low in cost. Plugs into any A.C. convenience outlet of 110 volts. It is properly insulated and built for safe **FAST** use. Has long-lasting full-size Heating Element. Protected adjustable Temperature Control of high accuracy. Designed to withstand long, tough, continuous use.

The Wells Thermosealer, built of Aluminum and weighing but 10 ounces does not fatigue the operator—speeds sealing, lowers cost.

Buy Now from Your Dealer
in Heat-Sealing Materials

WELLS MANUFACTURING CO.



220 Ninth Street
San Francisco 3, Calif.



Tupper Seal, air and liquid-tight flexible covers fit, and are included in the sale of all Tupperware Canisters.



The Tupperware 50 oz. Canister is "standard equipped" with the Tupper Seal, air and liquid-tight flexible Pour All cover.



The Tupper Seal, air and liquid-tight flexible Pour All cover is used on every Tupperware 20 oz. Canister.



The Tupper Seal, air and liquid-tight, Pour All cover is a cover for 46 oz. cans, Tupperware Sauce Dishes and other containers of metal, glass or pottery. Foods easily suspended without removing entire cover.



The Tupperware Wonder Bowls are usually fitted with Tupper Seal, air and liquid-tight covers.



TUPPER / Seals

air and liquid-tight, flexible covers for Tupperware Tumblers, Canisters, Wonder Bowls, Cereal Bowls and many another container of glass, metal and pottery, the contents of which it is desired to keep fresh and wholesome.

TUPPER /



There's a Tupper Seal, air and liquid-tight flexible cover for Tupperware 3, 5, 8 and 12 1/2 oz. Tumblers too, and these Tupper Seal covers fit many other containers of metal, glass and crockery.

The Tupper Seal, air and liquid-tight flexible Pour Tap cover, specially designed as a dispensing cover for specified diameters of containers holding foods such as syrups, salad dressings, catsup.



The cover of the Tupperware Broad Server which serves as a bread toaster is designed to give similar results as Tupper Seal, air and liquid-tight Flexible covers. Keeps contents fresh as no other such container.



When equipped with Tupper Seal, air and liquid-tight, flexible covers, Tupperware Cereal Bowls serve many another purpose.



The Tupper Seal, air and liquid-tight flexible cover made for Tupperware 1 oz. Tumblers also fits a 1/2 pint with all Tupperware Funnel as a lid when funnels are used as storage containers.

FORMAL NOTICE!

9th November, 1949

EXCLUSIVE!

U. S. Patent #2,487,400

The Tupper Corporation has attained a position of leadership in this industry by incurring great expense and expending painstaking effort in the development, design, manufacture and exploitation of its many world-known products.

The Tupper Corporation further has anticipated the inevitable attacks to which leadership is subject and has taken measures provided by law to preserve the creative rights to its products, methods and design by patent protection both in the United States and abroad.

Tupper Seals for Tupperware shown in this advertisement are just a few of the forms covered in this manner and are specifically covered by U.S. Patent #2,487,400.

Only the Tupper Corporation, by U.S. Patent #2,487,400 has the right to make, use and vend container closures in connection with any and all types of containers throughout the United States and its territories as covered by the claims of the Patent.

Tupper Corporation will protect, according to law, the exclusive rights above granted

TUPPER CORPORATION

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IT'S ECONOMICAL!

IT'S PRACTICAL!

it's plastic
bags & liners of

Merithene

Merithene BAGS and LINERS are engineered
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- AREA—4 sq. in. to 3,000 sq. in.
- GAUGE— $1\frac{1}{2}$ mils to 8 mils.
- SHAPE—flat or gusseted

Immediate Delivery

Merithene* PLASTIC FILM has been tested and proven
superior in the following characteristics:

1. CHEMICAL INERTNESS
2. TEAR STRENGTH
3. LOW SPECIFIC GRAVITY
4. WATER RESISTANCE
5. FREEDOM FROM TASTE
ODOR
TOXICITY
6. WATER VAPORPROOFNESS
7. HEAT SEALABILITY
8. FREEDOM FROM PLASTICISER

*TRADE MARK

Write for samples and prices

Merithene

Magid—Robinson Co., Inc.

235 Fourth Avenue, New York 3, N. Y.

(Reg. 2-0-9)

toner, nor could scarcely afford the expense of hand cartoning in these competitive times.

Its use for irregular objects or for multiple loads not well suited to automatic handling is obvious.

Under development for more than two years, the constant-motion, vertical cartoner is the product of one of the oldest manufacturers of cartoning equipment. Many of its features will be recognized as having been adapted from the well-proven, high-speed, fully automatic machines which this company has been building for packagers for 31 years.

CREDITS: CMV semi-automatic cartoner developed and produced by R. A. Jones & Co., Inc., Cincinnati, Ohio. Vibrating mechanism, Syntro Co., Homer City, Pa. Circle F cartons, Trenton Folding Box Co., Trenton, N. J.

Delicatessen—

(Continued from page 109) type round containers with window lids, and these foods account for approximately \$700,000 of the annual \$10,-000,000 sales volume of the store—7% of the total volume.

Volume operators such as the Herbert Strausser Food Market in Pennsylvania Station, New York, order imprinted containers with the firm name, address, phone number and the legend "Food Gifts of Distinction since 1885" printed in green on the sides of white containers. For volume items, the name of the product and weight may be printed on the lid in some few instances.

Jewel Food Stores, Chicago, market gelatin salads, gelatin desserts and potato salad in window-lid containers. They use a curved rubber stamp or printed labels on the lid, carrying the name of the product, the firm's name, price and weight. Printed labeling is normally used only for items which sell in large volume.

Modern living habits indicate a trend toward freshly prepared delicatessen items to obviate home cooking, wherever quality items can be obtained quickly and conveniently. The sales potential in this field has hardly been tapped.

The current packaging practices, dictated by the experience of pioneers in the field, can provide a profitable study for both food dealers and package suppliers.

ANILOX PRESSES
REWINDERS
SLITTERS
BAG MACHINES



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**PRECISION WEIGHT
ACCURACY** the direct
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No damage to delicate
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Fills any dry, semi-dry,
free flowing or slow flow-
ing products.

Packages from gram
fraction to 10 pounds.

Fills all bags or contain-
ers at any speed from 2
to 120 per minute.

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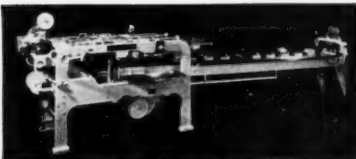
**Paper
Specialties**
WRAPPED AND LABELED TO
SELL AND SAVE... ON THE
"Oliver"

To package paper luncheon sets, gift wrappings, social stationery (envelopes and flat sheets), several makers use the fast "Oliver." Some items are wrapped without supports, others need a card automatically fed onto the conveyor.

To handle a wide range of package sizes demands quick adjustability. The "Oliver" wraps up to 45 packages a minute. It can be changed for package size in a minute or two. Adjust wrapper length while machine is running. Switch from endfold to underfold instantly. The folds are neat, and the seal extra strong. An electric eye registers printed wrappers.

Smart, low-cost brand-name labelling is another must. The "Oliver" Labeler securely heat-seals a thermoplastic diecut label from a continuous roll (printed by Oliver) to each wrapper. The finished package catches the eye, and sells quickly.

Have you a package problem remotely similar to this? Write for complete information on the versatile "Oliver."



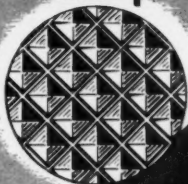
The "Oliver" is made in 7 different size ranges. With minor changes in equipment it is successfully packaging baked goods, fresh produce and meats, boxed candies, boxed cut flowers, textile items, etc.

OLIVER MACHINERY COMPANY, GRAND RAPIDS 2, MICH.

"Oliver" Wrapping Machine

WITH "OLIVER" AUTOMATIC ROLL-TYPE LABELLING SYSTEM

EVENFLO
aniline printing rolls



**—METER THE INK
FOR BEST RESULTS!**

EVENFLO ENGRAVED INKING ROLLS

eliminate ink waste, poor quality runs and rejects due to faulty inking and need no adjusting. New Evenflo engraved ink-metering rolls make tedious adjustments unnecessary. Ink is fed in the exact quantity necessary for fine presswork, continuously and automatically. No press time is lost, no ink wasted and less printing stock is spoiled due to poor inking.

**NO-FLEX PLATE ROLLS AVAILABLE
ON SHORT NOTICE AT LOWER COST**

No-Flex—the new plate rolls that completely eliminate flexing and whipping—are your guarantee of a perfect impression. Special high speed lathes and equipment and improved methods of manufacture mean you get precision made rolls, quickly, and at lower cost. All No-Flex rolls are ground finished to your exact specifications and carefully inspected before shipment. The next time you need plate rolls, call Pamarco for faster service, lower cost and a better printing job. Quotations on plate, impression, and special rolls supplied promptly.

PRESS BUILDERS

Evenflo rolls, installed as original equipment, make your presses easier to sell because they print better, use less ink and require less operator attention. Inquiries from press manufacturers are invited. Prompt estimates on receipt of specifications.

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—the handy way to
test color and coverage

No need to set up a machine for testing ink. Quick as a wink, Evenflo Hand Proofer produces an exact sample. Interchangeable rollers to match the one in your press or presses equipped with other than Evenflo rollers.

EVENFLO PRODUCT OF
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Packages Nearly Everything



Yes, there are few manufactured products today that can't be packed for shipment in a Gaylord Box. The ingenuity of Gaylord's Engineering and Research Department, together with its broad experience, assures a sound, sensible solution to most packaging problems.

So it makes little difference what product you manufacture—the chances are that Gaylord can be of assistance. Just call the office nearest you.

GAYLORD CONTAINER CORPORATION General Offices: ST. LOUIS

CORRUGATED AND SOLID FIBRE BOXES ●

FOLDING CARTONS ●

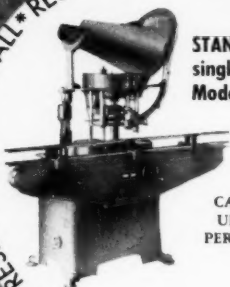
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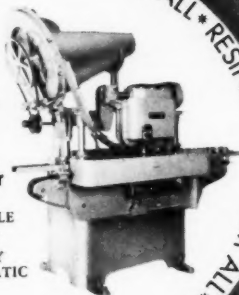
RESINA CAPPERS

A model for every purpose ...
A speed for every need!



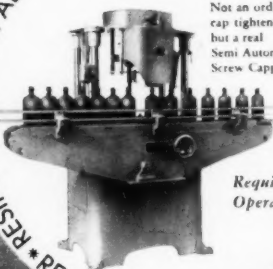
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CAPACITY
UP TO 60
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straight
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FLEXIBLE
FAST
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**SEMI
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Not an ordinary
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Requires no
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Send for descriptive
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WRITE FOR SAMPLES

... And See How Much More
Your Dollar Will Buy In

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Here's another
case where "one sample is
worth 10,000 words."

An actual Lusteroid container in
your hand will quickly prove its quality
and worth to you in modernizing your pack-
aging and merchandising.

You'll like its feather lightness that saves han-
dling and shipping costs. You'll be impressed that
it is so strong, rigid and shatterproof—assuring all
the protection your product may need, without
sacrificing its all-important visibility. Your feel for
merchandising will respond to the fact that Lusteroid
is available in all colors. And you'll appreciate the
additional savings in labeling, made possible by
Lusteroid's printability.

Lusteroid vials and tubes come in standard
diameters from 1/4" to 1 1/2" and lengths up
to 6". Specials, too. Cork, slip-on and screw
cap closures.

● What sizes do you require?
Send for samples and new
low prices today.

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CONTAINER COMPANY, INC.

10 West Parker Avenue, Maplewood, New Jersey

**THE SHELF-SHAPE BAG
THAT PACKS WITHOUT SLACK**

Deltaseal[®]



**One reason why more manufacturers
are turning to the DELTASEAL PACKAGING SYSTEM***

Deltaseal Bags are flat...top and bottom...so, they're easy to stack in attractive, space-saving displays. There's no slack-pack appearance to discourage sales. The Deltaseal closure helps the bags keep that full-pack look. Housewives like this closure, too, because the "built in" spout makes easy pouring.

Deltaseal lowers packing costs. Deltaseal Packaging Machinery is designed for Deltaseal bags alone. It fills, shapes and closes the bags fast...2,000 or more an hour, depending on the commodity. Mostly automatic, it handles volume packing with real efficiency.

Let a Bemis representative explain more of the benefits in the Deltaseal Packaging System. Call or write your nearest Bemis office.



***THE DELTASEAL PACKAGING SYSTEM**
Deltaseal Bags plus the Deltaseal Packaging Machinery.

Baltimore • Boise • Boston • Brooklyn • Buffalo • Charlotte • Chicago • Cleveland • Denver • Detroit • Houston
East Pepperell • Indianapolis • Jacksonville, Fla. • Kansas City • Los Angeles • Louisville • Memphis • Minneapolis
Mobile • New Orleans • New York City • Norfolk • Oklahoma City • Omaha • Peoria • Phoenix • Pittsburgh • Salina
St. Louis • Salt Lake City • San Francisco • Seattle • Vancouver, Wash. • Wichita • Wilmington, Calif.

Bemis 

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Modern Packaging reserves the right to accept, reject or censor classified copy.

EMPLOYMENT • BUSINESS OPPORTUNITIES • EQUIPMENT (used or resale only)

MACHINERY FOR SALE

PACKAGING EQUIPMENT FOR SALE: Three (3) complete Packomatic automatic lines, 70 cartons per minute, for dry, granular or powdered material such as soap, cereal, etc. One line essentially new, other two lines have been used one to two years. Each unit consists of following equipment—Packomatic Model 16 Top and Bottom Sealers, Dryers, complete w/ drives and motors, carton size 6" x 2½" x 8½", \$4,800.00; Packomatic Automatic Carton Feeders for Model 16 Top and Bottom Sealers, \$2,695.00; Packomatic Telescoping Fillers for Rectangular Sealed Cartons complete w/ drives and motors, \$4,000.00.

MISCELLANEOUS EQUIPMENT FOR SALE: (1) Niagara Metal Shear—\$195. (2) Royal Bean Pumps 11 gpm—\$500 each. (3) Frick Ammonia Compressor w/ ammonia receiver and coils—\$125. (4) Electric Motors, 3 phase, 220 V, 50 and 60 cycle, ½ to 10 HP. GE 7½ & 3½, 220 V, 1710-850 RPM Electric Motors—\$95. (5) GE 5 & 2½, 220 V, 1710-850 RPM Electric Motors—\$75 each. Automatic Transporter TW 6760 Platform Type—\$600. (2) Automatic Transporters, TW 6760 w/ 1 D-4 ten cell Edison Battery—\$600 each. (2) Baldor Battery Chargers, type 60-F, 220 V, 60 cycle, 15 amp., with automatic timer—\$145 each. Purex Corporation, Ltd., 9300 Rayo Avenue, South Gate Calif., Mr. Latulippe.

FOR SALE: New Era Press—Roll Feed—Suitable for Paper or Cloth Labels, Tags, or Form Work—9 x 12—2 Colors—Cutoff, Perforate and Multicut Attachments—Can be seen in operation in New York City. Box 928, Modern Packaging.

EQUIPMENT FOR SALE: (100) Flats made by Colson, 42" x 54" and 11" off floor, w/ 2-4" hard rubber wheels; also (3) hand jacks to lift front of flats—\$110 each; Jacks \$25 each. Purex Corporation, Ltd., 335 Mehle Street, Arabi (New Orleans), La., Mr. Turner.

MACHINERY FOR SALE: Shumann Automatic Bag Making Machine with Electric Eye, practically new—\$2,000.00. Mrs. A. K. Cokrell, 2235 Cedar Crest Boulevard, Dallas, Texas.

EQUIPMENT FOR SALE: Automatic Transporter TW 6760 w/ 1 D-4 ten cell Edison Battery and Baldor Charger—\$600. Automatic Transporter, TW 6760 w/ 1 D-4 ten cell Edison Battery—\$550. Industrial Battery Charger type 60-F, 220 V single phase, 60 cycle D.C., Code 803 for ten Edison cells—\$75. Baldor Battery Charger type 60-F, 220 V, 60 cycle—\$125. Purex Corporation, Ltd., 9600 Chippewa Street, St. Louis, Mo., Mr. L. J. Pelletier.

FOR SALE: Hamblet Sheeter 72 inch width, fully equipped and in excellent running condition with laybox, controls, motor, etc. Especially low-priced. Box 929, Modern Packaging.

EQUIPMENT FOR SALE: Automatic Transporter, TW 6760 w/ 1 C-4 6 cell Edison Battery; also Baldor Battery Charger w/ time clock—\$550. Yale hand lift truck—\$125. Purex Corporation, Ltd., 6000 Denton Drive, Dallas, Texas, Mr. R. J. Rees.

HELP WANTED

MANUFACTURERS REPRESENTATIVE to handle complete line of polyethylene bags. Prefer man who has 1 or 2 allied lines. Should be contacting paper jobbers, paper merchants, food and drug packagers, etc. Good territories open. Write Dura-Lee Corp., 1628 Main, Kansas City, Mo. State qualification and lines you have at the present.

UNUSUAL OPPORTUNITY for active and aggressive man with thorough knowledge of transparent bag field. Must be well acquainted with manufacturing, promotion and sales. All replies will be kept strictly confidential. Box 917, Modern Packaging.

WANTED: Eastern Seaboard sales agent for rotogravure printed foil, paper and cellophane labels and wraps. Experience and customer contacts necessary. Attractive commission arrangement. Write Box 918, Modern Packaging.

SALESMAN to sell hand-made, semi-hand-made bags and industrial papers. State of Indiana. Permissible to handle another line. Box 919, Modern Packaging.

SALES REPRESENTATIVES. Manufacturer of well-known specialty closure for cans offers attractive commission proposition to men now calling on the packaging trade. Leads furnished from national advertising.

Territories available include Texas, Missouri, Tennessee, Kentucky, Georgia, Florida, North and South Carolina; also Montreal and Toronto, Canada. Box 920, Modern Packaging.

MISCELLANEOUS

SAINT LOUIS manufacturer's agent now contacting manufacturers, engineers and processors in this territory seeking major account of reliable and progressive manufacturer. Can give personal, prompt and efficient handling your business. Box 921, Modern Packaging.

WANTED: SIMPLEX Bag Machine—Model 10—good condition with or without electric eye. Box 924, Modern Packaging.

CONNECTICUT BROKERAGE representation paper, food and novelty jobbers. Immediate and thorough coverage of the Connecticut market through the paper, food and novelty jobbers. All of these accounts are covered at least every two weeks and some are seen every week. I have been selling these accounts for years and am well acquainted with their distribution. Only reputable manufacturers need apply. Box 922, Modern Packaging.

TIN CANS for sale cheap. 70,000 Quarts, 25,000 Pints, 10,000 Pints with Spouts. Lithographed but never used. Sell all or part. Also some Fibre Board Canisters. Write Box 923, Modern Packaging.

SPECIAL OFFERING up to approximately 180,000 lbs. aluminum sheets .010" x 32½" x 22½". Very attractively priced for immediate shipment. Sailings every week. Products & Commerce, Ltd., 14 Dominion Street, Moorgate, London, E. C. 2, England. Cables: Impulsus, London.

MACHINERY WANTED. Cellophane window machines, Staude or International, various sizes, also Gluing machines, other than straight line, late model, two color Mehle automatic presses. No dealers will deal only direct with principal. Gordon Cartons, Inc., 1629 Warner St., Baltimore 30, Md.

WANTED: Plastic scrap and rejects in any form. Cellulose Acetate, Butyrate, Polystyrene, Vinyl Polyethylene, etc. We pay top prices for clear, colored and printed scrap in any quantity. Box 781, Modern Packaging.

SITUATIONS WANTED

PACKAGE DESIGNER seeks position with manufacturer of products, or folding boxes. Background 18 years—creating folding containers, make samples—comprehensive sketches, research presentations. Have full knowledge of costs, art, reproduction, inner liners, boards. Function as a designer, or as salesman with ideas. Box 925, Modern Packaging.

PACKAGING ENGINEER. Princeton graduate, age 41, married. 5½ years experience, East and West coasts, sales and sales promotion of packaging materials including Plastic Films, Pionfilm, Cellophane, Foils, Kraft Paper Bags; also use of Moisture Barriers and Desiccants under Government specifications. Background of Cost Accounting and Plant Supervision. Residing Los Angeles area would transfer. Best references. Box 926, Modern Packaging.

AVAILABLE: Packaging specialist qualified to take complete charge of sales promotion and merchandising for package manufacturer or development and procurement for package user. Midwest preferred. Box 927, Modern Packaging.

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Up to 120 words.....\$15.00

Up to 180 words.....\$22.50

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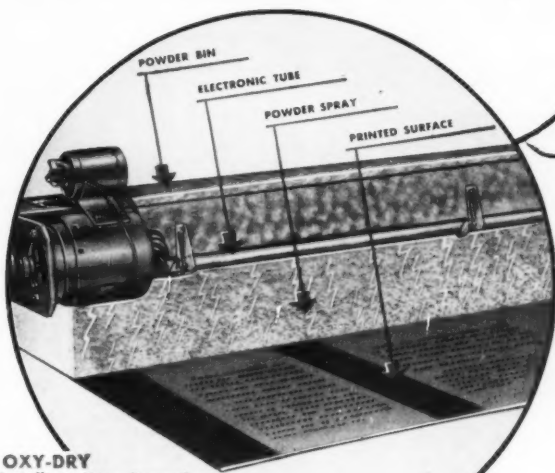
For further information address Classified Advertising Department, Modern Packaging, 122 E. 42nd St., N. Y. 17, N. Y.

DON'T STOP THE PRESSES BECAUSE OF OFFSET!

READY

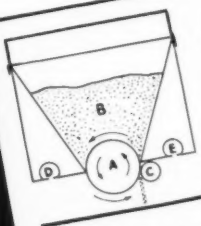
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STOP



OXY-DRY
Installs on Every Type of
Press . . . Works with
Any Kind of Printing
Process

HOW IT WORKS



As brass cylinder (A) re-
volves, anti-offset powder
(B) is distributed past

electronic tube (C) re-
ceiving 10,000 volt posi-
tive charge and bonding
instantly across freshly-
printed surface below.
The static electricity (neg-
ative electric charge) in
the paper is instantly dis-
pelled. Air vents (D & E)
are required only under
extremely drafty shop
conditions.

ASSURE FULL PRESS LOAD CAPACITY WITH **OXY-DRY** ELECTRIFIED POWDER METHOD OF OFFSET PREVENTION

Simply install the light, compact OXY-DRY Electrified Powder SPRAYER permanently in your press delivery and your *offset troubles are over!* This work-speeding, money-saving fact is being demonstrated daily on every type of press, the country over—sheet-fed, high-speed rotary and multi-colored . . . in letter-press, offset.

...

The OXY-DRY Electrified Powder process proves daily, in hundreds of exacting installations, that it *prevents offset and eliminates static on all types of work . . .* including overprint varnish, high-gloss and metallic inks on cartons, boxes, labels and cellulose printing.

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Original cost, operating economy, effectiveness of *offset-prevention* and permanent health factors of OXY-DRY are so attractive as to amaze you. Get all the facts. Write today for full information applying to your type of press and work.

Write Dept. M P

OXY-DRY SPRAYER CORPORATION

320 S. Marshfield Ave., Chicago 12, Ill.

OXY-DRY

full-press-delivery offset prevention

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Modern
packaging



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MODERN PACKAGING

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means**

**perfection in
petroleum wax
for every packaging need**



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by Miro Container Co., Inc.,
Brooklyn, N. Y.

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TYTON Overwraps are specially waxed for quick, positive heat-sealing . . . sparkling eye-catching gloss . . . *extra* food protection.



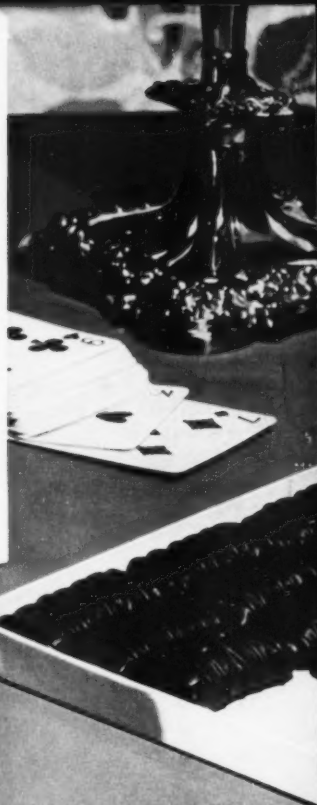
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FOR AMERICA'S FINEST FOODS

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